The BULLETIN

THE NATIONAL RETAIL DRY GOODS ASSOCIATION

MARCH, 1946

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The Bulletin
OF THE NATIONAL RETAIL DRY GOODS ASSOCIATION
Volume 28 Number 3
MARCH, 1946

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This Camouflaged Inflation

By Benjamin H. Namm,
President, NRDGA and President, The Namm Store, Brooklyn

I PROFESS that I am most disturbed over the economic situation in this country. We now have been at peace for seven months. The reconversion of our industry from war materials to civilian goods was unbelievably rapid. Everything was in readiness for the resumption of large-scale production of things we have wanted for so long, by fall or early winter. And then our troubles began.

There are many who lay all the blame on Labor—and others who lay all the blame on Management, depending upon their viewpoint; but I do not blame either Labor or Management for the prolonging of our difficulties. The real blame for that may be ascribed to the fumbling of the cost price problem in Washington.

The Missouri Compromise of 1821 is often regarded by historians as one of the remote causes of the Civil War. Let us hope that the Cost-Price Compromise announced by a contemporary Missourian, President Truman, will lead us out of our labor conflicts and into the paths of abundance and prosperity.

The OPA officials, who have been trying to hold the line on prices at any cost, are still in the ascendancy. I say at any cost advisedly, for the rigidity with which they stick to unsound wartime formulas and methods already has incurred a loss of income to the American people amounting to hundreds of millions of dollars. It is time to abandon rules which are keeping production hog-tied and depriving our people of the goods they want.

The policies of which we complain are dangerously inflationary in effect, for they have stimulated the production and sale of second-rate merchandise at excessive prices while standard and badly needed goods cannot be found at any price. Our economic machinery has been dislocated, and we must have legislative relief in the form of realistic amendments to the Price Control Act in order to avert serious price inflation.

It is the consuming public which suffers most. Let me illustrate: One of the leading makers of cotton work socks was refused a modest price increase by the OPA to cover his rising costs. He put 80 per cent of his machinery in grease, and on the remaining 20 per cent made woolen socks, for these could be distributed at a satisfactory price. As a result, his profit on 20 per cent operation—and 20 per cent employment—was greater than that on full production of his standard line.

End of OPA Not Asked

We do not seek the removal of price control or the winding up of the OPA at this time, or even within the next few months. Such action would be folly in the face of the present shortage of goods; but we do demand the elimination of the many unfair and uneconomic regulations that have throttled production and lit the fuse of the bomb of inflation. I fervently hope that we can extinguish the fuse before the bomb explodes.

The most important need in this country today is to get full production going. It will provide jobs and income, and that income will buy the goods needed so badly by our 140 million people—and our 12 million returning war veterans have need of almost everything to wear and use. The freely moving cycle of production and distribution is the substance of our economic system. Whether we call it a competitive system or an incentive system, it is the best that any country has ever devised. It has created the most favorable living conditions under which man has ever existed on this planet, but the Washington planners have thrown the gears out of mesh.

We must have production to defeat inflation, to put the economic cycle back in operation, to maintain and enhance our living standards. Under present OPA regulations, the public is forced to buy inferior merchandise at higher prices than are allowed the standard lines of old established manufacturers.

We demand the removal of regulations which foster and prolong this state of affairs. We ask OPA to adopt a more realistic and understandable policy. We have no selfish motive in doing this. We believe that it is the right thing to do for the sake of the people as a whole.

Let me read a few words of the resolution adopted at the recent annual convention of the National Retail Dry Goods Association, which clearly define our position:

"We do not want to end price control immediately; we want to amend it to increase production. As retailers in daily contact with the public, we fully realize that national disaster would result from serious price inflation. We submit that there is only one sure cure for the dangers of inflation, and that is sustained all-out production of goods which will quickly make price control unnecessary."

This position was reiterated and confirmed by Commodore John D. Small, the Administrator of the Civilian Production Administration. Accompanying a thorough analysis of the national situation, Commodore Small with complete understanding and grasp of the economic ills which beset our na-

"While it is entirely true that without price control throughout the war the nation's economy would have suffered infinitely more than it has, it is equally true that standards more suitably adapted to our present needs should take its place."
—Report of the Senate Small Business Committee, February 13, 1946.

tion, said in his Monthly Report on Civilian Production, issued January 28, 1946:

"If we are to avoid inflation we must have all-out sustained production, a flood of goods onto dealers' shelves, and adequate supplies of raw materials and component parts for industry. But instead, we have rapidly growing black markets, a trickle of consumer goods to dealers' shelves, and increasing shortages of materials and components. The price level is being held down firmly, but the maintenance of a firm price level means little if goods are not available for purchase at that level."

I say to you, in all sincerity, that I am extremely proud of the record of our Association in its stand against inflation before, during and after the war. In this respect, I refer you to the statement volunteered by Leon Henderson, the original Price Administrator, in hearings before the Senate Committee on Banking and Currency on the first Emergency Price Control Act.

Mr. Henderson said: "Retailers were the first group to realize the dangers of inflation."

He added that retailers had been holding down prices by averaging their costs and basing retail prices on that average instead of replacement costs.

Retailers Fought Inflation Early

Before the war in Europe was two weeks old, on September 12, 1939, the National Retail Dry Goods Association voluntarily began a campaign to prevent price increases. In the following year, we drew up a Buyers' Pledge that was signed by more than 10,000 store buyers, in which they undertook to resist unjustified price increases and to refrain from talking to consumers about threatened scarcities or rising prices.

Thus, we acted against price inflation two years before OPA came into existence. We sought to prevent public over-buying and hoarding one year before OPA. We undertook a form of voluntary rationing before the first book of ration stamps was even thought of. We shall still be fighting inflation long after the OPA has ceased to exist.

In our efforts to prevent rising prices and a scarcity of supplies, we had the strong and loyal support of our manufacturing friends. I may say that they were as sensible of their obligation to keep prices from rising unduly as we.

Wade McCargo tells Senate Committee about the underwear shortage.

The policies which we adopted and followed consistently helped to maintain the flow of merchandise throughout the war. At no time were the people of this country in serious need of any essential product. This achievement did not just happen—it resulted from the most diligent, resourceful and painstaking effort, and was implemented by the greatest demonstration of producer-distributor team-work that this country has ever known.

Think of it, ladies and gentlemen, *today*, seven months after the end of hostilities, there is less merchandise available at fair prices than at any time during the war. There is a tremendous amount of money in the hands of the public which can only be spent in the black markets because the legitimate merchant has so little to offer.

After the Price Control Act came into existence, we cooperated unceasingly with OPA to make the program a success. We gave unstinting support and advocated intelligent administration of the Act.

Of course, we had differences of opinion with the Administrator. But our complaints, which we considered highly justified, had to do with methods and policies and not with the basic principles underlying the Act.

We regarded price control as serious business. We recognized that it was the aim and duty of Government to protect the public and business itself, and that a deliberate disregard of the price regulations would not merely be stupid, but sabotage of the war effort. We insisted that our members comply fully with the rules, even while hotly contesting a number of them.

Had it not been for the wholehearted cooperation and compliance of retail stores in every community, there would not have been the ghost of a chance for the Price Administrators to achieve any sort of price control. We devoted our Association's facilities almost entirely to analyzing and simplifying the multitude of Price Regulations for the benefit of our members.

This was no mean task. Let me quote a decision handed down by Federal Judge Coleman in Baltimore on January 15th:

"We believe," he said, "that if the OPA in drafting its regulations, is unable to say what it means in reasonably clear language, the public should not be penalized, but should be given the advantage of the ambiguity."

Yet, it was not mere phraseology

Bob Seidel repeats the famous story about the toy scooters.

"Business incentive and price control are entirely compatible if the control that is exercised is realistic and sound. Prewar dollar margins of profit were competitively established. Their restoration above existing costs would be neither inflationary nor extortionate. If permitted today the scarcity properly cited as an inflationary menace would rapidly be overcome."—Report of the Senate Small Business Committee, February 13, 1946.

that was our greatest concern. It was the context of the regulations. It is my opinion that the regulations went "off-the-track" in 1943. Our first great fight began with the promulgation of the Rayon Hosiery Regulation. Under that regulation, a large retailer was forced to buy at a lower price than the smaller retailer, and lest there be any question about what was intended, the regulation specified that both should buy the identical merchandise.

Later, our efforts were directed against OPA's so-called Price-Line Limitation. This, in brief, permitted manufacturers who did not previously produce an article to manufacture it and to introduce price schedules far above those permitted to old manufacturers of like articles. To make matters worse, a large number of the "New" articles can be described only as "ersatz", for most of them are inferior in workmanship and materials to the old articles.

This, gentlemen, is one of the most serious situations which we have encountered under OPA. A few months ago, we got together an exhibit of more than 200 items of merchandise of generally inferior quality that had been allowed better prices by OPA than were permitted on standard merchandise made by old established makers. We took this exhibit down to Washington, where members of both Houses of Congress and the public were quick to see the point.

This substitution of inferior merchandise for standard grades constitutes "Camouflaged Inflation." I, for one, do not believe the disguise is very good. I need not liken the attitude of the OPA to the fabulous behavior of the ostrich, but does anyone believe, for a minute, that the merchandise-starved public is deluded in any way?

How did OPA react to our presentation of the facts? Mr. Bowles called our exhibit a "propaganda hoax" and describes us as "the relentless foes of price control." *He ought to know better!* I am firmly convinced that he does.

Although he attempted to discredit the exhibit, you and I, and every other consumer, know that we still lack men's suits, shirts, socks and pajamas; we do not have the sheets and pillow cases which most households need desperately. But there are plenty of non-essentials, luxuries and inferior goods of various sorts which the public does not hesitate to buy, regardless of price. That, gentlemen, is "Camouflaged Inflation," and it is completely attributable to OPA.

"Camouflaged Inflation" lowers our living standards. The only cure will be an Abundance of Goods at Fair Prices.

What do we merchants want precisely?

First and always, we want the prompt resumption of full production. Every effort should be bent toward increasing the supply of goods. This will restore the balance between the supply of money and the supply of merchandise. This will remove the danger of soaring prices.

As long as OPA adheres to existing policies, production will be hamstrung and the present scarcity of merchandise will continue. But nothing will stifle the demand of 140 million consumers for merchandise of every description. Certainly, the true role of OPA is to prevent the tremendous increase in the nation's money supply from creating price inflation through scarcity; yet their policies are prolonging the scarcity of goods and directly fostering price inflation.

When the wants of the people can once be supplied, it will keep our mills and factories busy and provide jobs for the many who need them. The jobs will produce income, and the income will permit people to buy what they need and to maintain or improve their standard of living. The public's savings will be diverted into safer channels.

The returning veteran and his family deserve a vastly better deal than they are getting. They are finding their standard of living reduced, not only because of the shortage of goods but also because the merchandise available to them is of inferior grade and high in price. They find, too, that it takes more of their dollars to get the necessities of life.

To create full production the manufacturer, the wholesaler and

(*Continued on page* 78)

HOW series

How to Plan for Higher Art Needlework Profits

By John C. Oram, *Russell W. Allen Company*

IT is to the credit of American merchants that, despite opportunistic policies demanded by current conditions, so many of them have their eyes focused on the not far distant future when the competition for customers will again replace the competition for merchandise. And it is to their greater credit that they are taking definite steps to meet the problems which the era of keener competition will bring about.

Perhaps the most fundamental problem which department store heads know they will have to lick is that of maintaining net profit; for they realize that this cannot be obtained by the mere act of reducing service, since service is the department store's stock in trade.

How to maintain service to customers and yet make its operation so efficient that operating and selling costs will be reduced is the number one problem of department store management. While it is a storewide problem, it must be approached department by department.

We have had the privilege of working with a number of stores along those lines. We have also been asked by far-sighted manufacturers to make studies of store operation as applied to the particular departments handling their merchandise, to see if we can develop improved operating and merchandising that would contribute to more efficient selling. In this we have been fortunate in obtaining the wholehearted cooperation of many representative stores, large and small.

We have made such a study for Bernhard Ulmann Co., Inc., who manufacture and distribute practically every classification of merchandise that goes into the Art Needlework department. We believe that results of this study will prove of interest not only to merchants who operate Art Needlework departments, but to every merchant because it brings to light definite principles which can be adapted to the problems of every department.

Our first analysis of a typical Art Needlework department brought to light many facts of which store management apparently was not aware. For example, few merchandising executives could explain why prior to 1940 the Art Needlework department, with an average *gross margin* about 3 per cent higher than the store average, lagged behind the store average in *net profit*. Our analysis showed two main reasons for this: low sales per square foot resulting in high occupancy expense and high selling expense.

It became obvious that if stores could use selling space more efficiently and reduce selling time, even if store volume dropped, dragging Art Needlework volume with it, this department could make a profit.

Tackling the Problem

So our problem became clearly defined. How can space be used more efficiently? And how can selling time be reduced?

Taking first things first, we asked: "What is an Art Needlework department?" That would seem a simple question, yet of all the stores to whom we put that question each had its own answer and no two were alike. The conclusion was obvious that there is no such thing as a standard Art Needlework department. The proof may be found in Chart "A" shown on page 22. The difficulty of maintaining sound classifications and assortments in a department so full of unrelated merchandise is apparent. Nor does it require a merchandising genius to realize that stocking small quantities of many items has a weakening effect on the depth of assortments in the basic classifications which should be the backbone of the department.

In our analysis of Art Needlework departments we found that few stores had any figures on the performance of the various classifications within the department. So we had to dig for such information analyzing thousands of sales checks, observing thousands of customers for each classification separately.

Let us look at some of the findings that came to light as a result of our analysis of the Knitting Yarn classification. We found that in typical stores nearly 50 per cent of the Art Needlework department sales is accounted for by knitting yarns. The size of the store seems to have little effect on the importance of yarn sales to total needlework sales. We found also that there was no accepted technique for displaying and selling yarns.

Our study also revealed that yarn displays generally waste considerable space and as a rule lack adequate lighting. Few stores are really taking advantage of the opportunity for attention-getting displays presented by an item as colorful as yarns. Informative signs, which would make it easier for a customer to shop, are conspicuously absent in most stores.

These findings charted our course. What are the right methods for stocking and displaying knitting yarn to make most efficient use of selling space and selling time?

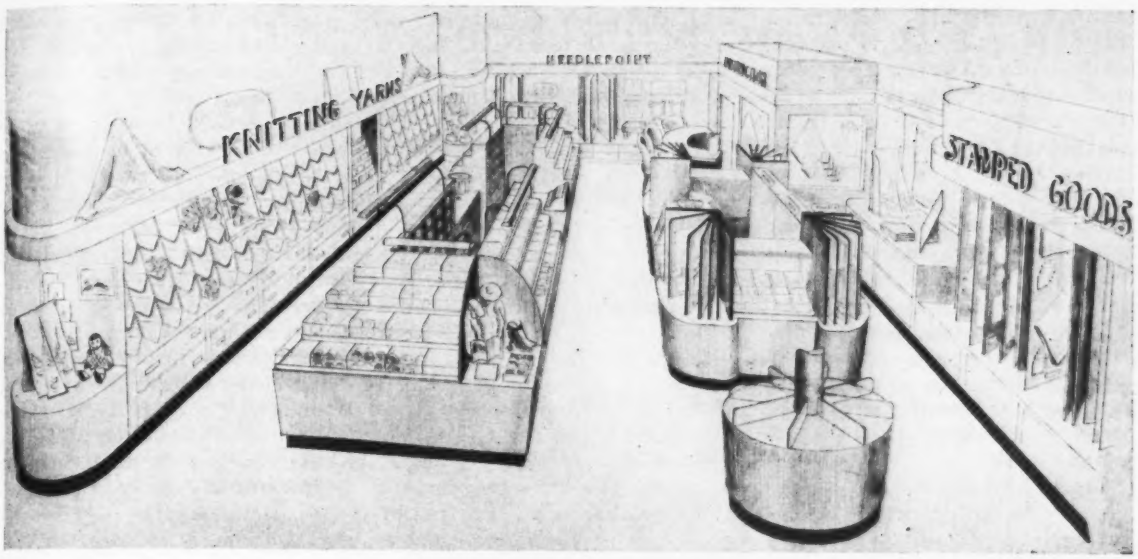
Naturally the first step was to find out what percentage of yarn customers need the help of salespeople in making their purchase, and how much help they need. Not one of the stores we studied seemed to know the answer . . . not even the few large stores which had re-designed their fixtures in an attempt to increase selling effectiveness.

So we studied the actions of thousands of customers. Trained observers recorded how often they required sales advice, what type and price they bought and whether or not they bought more readily from a show case, a back fixture or a table.

These were the startling results:

85.9 per cent of all customers knew the *type* of yarn they wanted.

67.5 per cent of all customers knew the *amount* of yarn they wanted.



Here is a layout for the Needlework Department using the specially-designed fixtures embodied in the "Ulmann Plan". It is intended for a store with a total volume of 3 million dollars. The Art Needlework department in most stores of this size now occupies about 1600 square feet. In a layout like this, twice as much merchandise can be stocked and displayed as under today's methods, thus providing the means for increasing sales, cutting occupancy expense, reducing selling time . . . which add up to higher net profit.

What's more, these customers knew what they wanted and how much they wanted, *regardless of price or method of selling yarn.*

These facts pointed to one conclusion: Regardless of price or kind . . . at least 67.5 per cent of all knitting yarn customers could make their own selection without much help from the salesperson. Knowing this we could work on ways and means of taking advantage of this fact.

It became obvious that the first principle of selling yarns is to use "open selling". It is important, too, at this point to avoid confusing "open selling" with "self service". "Open selling" is designed to enable the salesperson to give *faster* and more *efficient service,* while "self service" puts the complete burden of selection on the customer with practically no attention from the salesperson.

We therefore proceeded to study various methods to determine the most efficient for open selling of yarn. We built test fixtures, put them into operation in cooperating stores, studied customer reaction and from these we came to the conclusion that an efficient yarn set-up must include many features, such as:

1. Heavy worsteds and other bulky yarns should be used in available wall space which should be open so that the customer can make her own selection.
2. Yarns must be well lighted and colors arranged so that the display will be the focal point of the entire department.
3. Bins must be made so that the customer can pick up the skein, feel it and replace it.
4. Informative signs must give the customer information as to the type of yarn, price per skein, number of ounces per skein, garments for which it can be used.
5. Instruction books and needle section should be located near yarns.
6. Salespeople must be taught that open selling is a means of rendering *a quicker and better service.*
7. Salespeople must be trained to *service immediately* customers who know what they want.

There are other principles, but these give an idea of the fundamentals that must be considered in laying out a yarn section and in designing yarn fixtures.

And so we set about to design a yarn fixture which incorporates all the principles we have found essential to efficient yarn selling. After testing and re-testing and re-designing these fixtures we have developed basic units which will display and stock *more than twice as much merchandise* than is possible in the same space under present methods. Tests have demonstrated that the principles on which these fixtures are constructed will reduce selling time, increase the average sale and decrease occupancy expense.

We followed the same procedure in studying the stamped goods classifications of the department. We found that the average sale of stamped goods was lower than that of the department as a whole, not because a lower average sale is inherent in the item itself, but because of the method of displaying and selling it.

We found considerable waste of space which reduced the sales per square foot and resulted in unnecessarily high space charges, yet only a small proportion of finished stamped goods models were usually displayed because of the space problem. Selling time for stamped goods also showed up as too high. In two stores we discovered that

selling time was 21½ times greater than for yarns because 41 per cent of the customers buy stamped goods and floss and customers want to inspect a number of designs before making their selection.

Under present methods this requires considerable salesperson assistance. Believe it or not, in some stores embroidery floss, which must be sold with the stamped goods, is often at the other end of the department. Analysis showed also that stamped goods, particularly smaller pieces, are a natural for multiple and ensemble selling, yet stores were taking very little advantage of this fact.

From these findings the conclusion was clear that stamped goods can be made a much more profitable classification by an increase in the average sale, a decrease in selling time, and the use of space to better advantage.

Naturally the next step was to find out how. And so we made more tests and came up with these principles:

1. We must make it easier for the customers to choose, and reduce the amount of time necessary for the salesperson to devote to them.
2. To utilize space to better advantage, methods must be found to display and stock the largest possible number of items in a given space and to make effective use of the space above and below the counter.
3. To increase sales, displays must show as many types of items as possible, giving an impression of assortment.
4. Floss must be displayed with stamped pieces so as to enable the customer to get as fast service as possible on this item.

We set about to design and test fixtures to incorporate the principles which would contribute to lower selling costs . . . and we have developed a fixture which embodies 15 principles to make the stamped goods operation more profitable and to recapture for the department store a great deal of the business which is now going to competing types of stores.

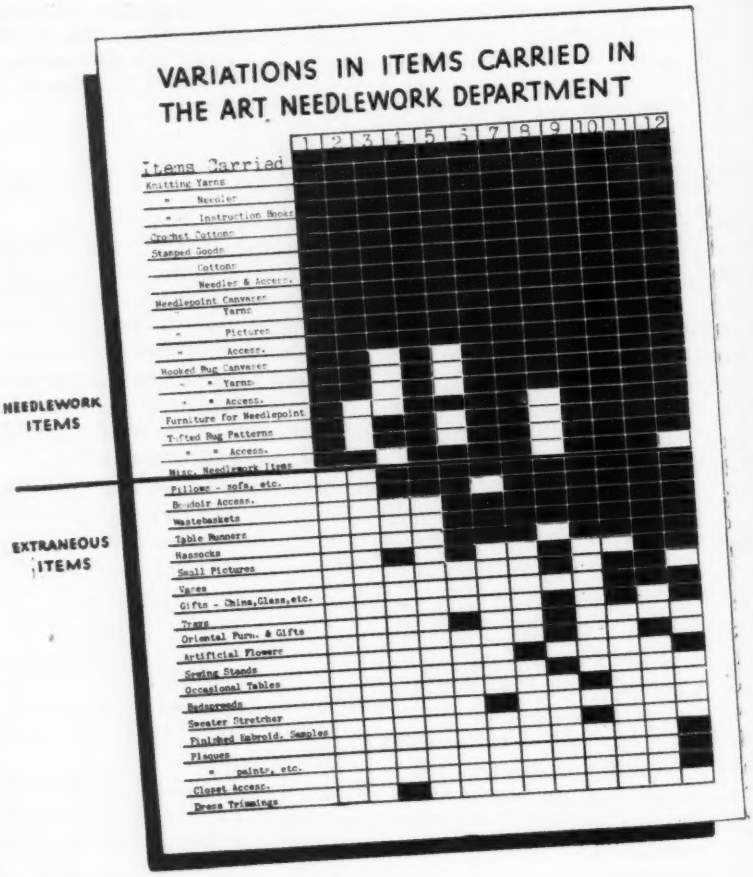
In our studies of crochet cotton we learned that this classification accounts for 20 per cent of the department traffic. As the items are small and fewer in number, the sales per square foot are the highest in the department, with a low selling expense and consequently, a lower average sale.

We also found that the present methods do not permit the speed of selling which they should. In this classification, open selling is a "must". And so we developed a fixture that will make this merchandise readily accessible and will save customers' buying time and salespersons' selling time.

It is of interest to department stores that while total variety store sales in the United States in 1939 were only 23 per cent of total department store sales, needlework sales in variety stores were 69 per cent of department store needlework sales. Of course needlework sections of variety stores have the advantages of a good main floor location and complete open selling for fast service. Department stores may not be able to match variety stores in location, but there is no reason why department stores cannot excel variety stores in selling methods. They can accomplish this simply by putting to work 36 principles which we have developed for the art needlework department and which are embodied in the specially designed department for a typical store, shown on page 21.

The units illustrated are flexible, so that they may be easily adapted to any area of floor space in stores large or small. The department

(*Continued on page* 78)



This chart shows how the items carried in the average Art Needlework department vary from store to store. Here are 12 representative stores. The items listed above the black line are the typical needlework items. Below the black line are listed items which are not basically needlework. The black spaces indicate that the store carries the item on that line. Note that while there are 18 "needlework" items, there are 20 extraneous items. Stores 1 and 2 carry only "needlework" items. The other 10 stores carry a large variety of extraneous items with store 12 stocking as many as 12 such items. No two stores carry the same classifications.

Long-Range Veteran Program Gets Going

By Albert E. Wool

THE Veterans Affairs Committee of NRDGA, under the able leadership of its new chairman, George P. Gable, president of the William F. Gable Co., Altoona, Pa., is going ahead under full power. It has adopted a program under which its functions will be carried on and which we anticipate will result in more and better assistance to veterans by the retail industry.

In broad outline, this is the program of the committee:

1. Purpose: to promote veteran re-absorption into community life, re-employment and rehabilitation, through a nationwide effort, aimed at the community level, designed to:

a. Help the veteran who wants to open his own store to get his start in business by offering competent advice, counsel and assistance;

b. Assist veterans desiring a career in retailing to find jobs in established businesses;

c. Foster the development of "on-the-job training" for eligible veterans in retail stores;

d. Foster retailers' cooperation with established federal, state and local agencies; and

e. Advocate employment of veterans, who as a class are a large group of the finest employee material ever available for employment in retail trades.

2. It is recognized that in thus assisting veterans, retailers will be doing themselves and their communities a great service. Every new business established on a sounder basis through competent advice and assistance rendered by retailers, is an improvement to the community in which it is founded. Every veteran who is placed in a retail job, and every man who is given training on the job under Federal law, is a valuable adjunct to the store in which he is so placed, and potentially a factor in the store's future success.

3. "On-the-job training" programs have been developed in a number of member stores. It shall be our policy to educate our membership more fully in the mechanics of this training; to emphasize its values and to advocate fuller exploration of its possibilities and more universal use of the program in retail stores. On-the-job training offers benefits to both the ex-serviceman and the employer: The veteran is able to learn a trade at which he can earn a good living, and the employer is given the means to replenish his stock of skilled workers at a minimum training cost.

George P. Gable

Mr. Gable has accepted the chairmanship of the Veterans' Affairs Committee. Other members are: F. G. Atkinson, R. H. Macy & Co.; B. H. Gitchell, Allied Stores Corp.; E. A. Raisbeck, Thorndike Deland & Associates; C. E. Harner, Hill & Knowlton; and Miss Lois Munn, James McCreery & Co. With the exception of Miss Munn, all are veterans of either World War I or World War II.

4. In furtherance of the foregoing:

a. All available data and information, and all pertinent laws and regulations affecting veterans will be gathered at the home office. Liaison will be maintained with all agencies and other industries for the receipt of information and the exchange of ideas;

b. All these materials will be studied and analyzed from the point of view of their applicability to retailing, and the results of such study and analysis published periodically.

5. The Veterans Employment Bulletin will be continued, with regular publication at intervals of not less than once a month. It will include the following services:

a. Answers to questions on retailer-veteran relations;

b. Interpretations of laws and regulations affecting veterans' employment, rights and benefits;

c. Notice and discussion of changes in the laws as they are enacted;

d. Latest developments in veterans' affairs in retailing and in other industries;

e. Any other matter which members may offer or consider of value to the trade in its veteran relations.

6. The Committee and Staff members will at all times welcome suggestions of additions to, or changes in, the foregoing policy or the services offered to veterans.

This program is intended to complement the work which has already been accomplished by the Committee. It is notable that emphasis is laid upon the veteran who has not yet entered upon a career in retailing but who wants to become a member of our trade as either a store owner, a regular employee, or a trainee for a job.

Veterans are already receiving assistance under the committee's program. Literature, advice and assistance are furnished ex-servicemen and women every day. During an average week, fifteen or more veterans—and servicemen still in uniform—call at the Association's New York office seeking information; and letters pour in from all parts of the country from others interested in opening retail stores or in

obtaining jobs. Among the latter group are many in whom NRDGA members might well find future employees.

Heretofore, NRDGA has published materials designed to help the veteran who is contemplating a business of his own, and to guide stores in their veterans' relations. Notable among these were HOW TO START A SMALL STORE, and YOUR STORE AND THE RETURNING VETERAN.

The first of these was a guide for the man who wanted to open his own business, giving timely advice on those problems which would concern him in such an enterprise. The second was a policy manual for use by stores in their relations with ex-service people who were already employed by them, and included chapters on such matters as veterans' rights and benefits; job analysis and evaluation; coordination in training programs; policies on reemploying former employees; the veteran as a new employee, etc.

Projected for publication in the near future, in line with the committee's program, are (a) A booklet on the subject of on-the-job training in retail stores under Public Laws 16 and 346 as amended; (b) A pamphlet on suggestions for the organization of, or for improvements in plans for retailers' cooperation in community (and state and or federal) programs of assistance to veterans; and other helpful materials. The Veterans' Employment Bulletin will of course continue to be published and it will be its function to keep the members up to date on current developments affecting retailer-veteran relations.

During the years of active hostilities the War Bond Drives furnished the proof, if proof were required, that the retail trade is a firm cornerstone of American life. The outstanding contribution then made by retailers to the war effort reaffirmed the fact that the retail store is really at the hub of its community's activities. In all industry, the retailer—the purveyor of goods and services—is the one businessman who comes into daily contact with the populace—the consumers.

It is natural, therefore, that now, in the postwar era, the retailer should continue to be the "spark plug" in the machinery of conversion to a full peacetime life, just as he "sparked" the home front during the war. The success of the peacetime job depends upon the success we achieve in making our ex-servicemen and women members of the community once more; happy, productive, each in his or her own business career.

Plastics Products for Every Department in April Exposition in New York

THE capabilities and potentialities of the plastics industry will be presented during the week of April 22 to April 29, when the Society of the Plastics Industry sponsors the first National Plastics Exposition at Grand Central Palace, in New York City.

Designed to keynote the campaign of the plastics industry for a proper understanding of plastics among manufacturers and retailers, as well as the consuming public, the exposition will present for the first time, under one roof, the manifold phases of the industry. Among more than 200 exhibitors, there will be represented all the industry's leading manufacturers of raw materials and machinery, and companies that fabricate both new and standard plastic parts and product parts.

For the first three days of the exposition attendance will be limited to the trade by invitation only. During the remaining three days, the general public also will be admitted.

The limited attendance during the first part of the week was designed to give the trade an unhurried opportunity to study methods and products. Because of the rapid technological developments in the plastics field and the lack of a single medium for imparting accurate information, the exposition is being presented to fill a long-needed service for manufacturers and retailers.

Hundreds of factory and laboratory experts, representing an impressive concentration of the skill and experience of the industry, will be available for consultation on problems of design, production and engineering.

Hundreds of new plastic products will be on exhibit for the first time. Special emphasis is being placed on information which will permit selection of the correct plastic for specified needs.

In addition to information imparted to the trade, the exposition and its attendant publicity is expected to stir considerable interest among the consuming public for plastic products and parts.

The type of products on display will include goods sold in virtually every department of a store. Among these are radios, wallpaper, toys, upholstery fabrics, cosmetic containers, dress goods, Christmas tree ornaments, electrical fixtures, combs and brushes, eyeglasses, dishes, refrigerators, books, playing cards, buttons, handbags, kitchenware, luggage, religious goods, costume jewelry, table tops, sports equipment, fountain pens, photographic supplies, furniture, phonograph records, window screens, shower curtains, raincoats and an endless number of other products.

Also of particular interest to retailers will be new types of display cases, directional and display lighting, packaging materials, office equipment, counter equipment, store furniture and electrical fixtures.

"The exposition will provide what, perhaps, no other exposition in the last decade has done in the way of an immense fund of ideas for manufacturers and retailers who are keenly aware of the need for developing products with maximum utility, serviceability and sales appeal to meet the unprecedented competition that will characterize the American economy when the great backlog of consumer demand has been met and business is again confronted with a buyer's market," said Ronald Kinnear, chairman of the S. P. I. Exposition Committee.

"The exposition will, in effect, be a brilliant pageant of this new plastics industry. It will present the basic plastics materials, the machinery that fashions them into products, the methods and services for doing it, and the plastics products themselves—all together, under one roof, all at one time."

PLASTICS: A Challenge to Merchandising

By Neil O. Broderson,
President, The Society of the Plastics Industry, Inc.

PARAPHRASING the words of an old tune, our dream year has come. The long-sought peace is here. With it have appeared many of the much-talked-about plastics items which the public has been seeking. In the background is the prospect of an ever-increasing array of products destined to reach into every walk of life and giving promise of launching a new era in merchandising.

After an auspicious start which war interrupted, plastics in their many and varied applications are now on their way to a leading place in the merchandising world. War demands proved them to have qualities and uses which, in many instances, are better than older materials can promise. With horizons limited only by the imaginations and productive skills of men and women who make and sell them, plastics present a major challenge to every store operator seeking to keep in step with progress.

This challenge is two-fold in nature. The first is the fact that plastics probably have more applications and uses than any other materials regularly sold in stores. The second is the fact that the public is seeking and demanding articles made of materials with which retailers need to become more familiar.

They are confronted with a situation calling for an understanding of new items of merchandise which is comparable to that which they have acquired about older staple items. Just as proprietors and salespeople know that there are differences between various woods, between various metals and between various fabrics, they must come to know and understand the differences in plastics.

The importance of such information becomes more apparent when it is realized that at this writing more than 450 different items made of plastics are being sold in department, hardware, drug and other stores.

From now on, there will be a steady increase in the number and uses of plastics articles. If the merchandiser is to meet the demands of his customers and do it in a way that will insure them of getting satisfactory service from their purchases, his need for understanding of the products headed his way is clearly evident. Many stores have already sensed the importance of an informed sales personnel and have conducted special classes to acquaint their employees with plastics, their properties and numerous applications.

The Society of the Plastics Industry is the leader of a nationwide move to help both retailers and their customers to become more familiar with plastics. It has issued two informative reference books which every merchandiser should find helpful.

[Editor's Note: One of these books is entitled "Plastics—The Story of an Industry." Portions of it, dealing with the characteristics of plastics materials and the structure of the plastics industry, are presented for retailers' use in this Handbook. The second book, entitled "Informative Labeling", was prepared by the S. P. I. for the use of molders and fabricators. It is included in its entirety in this Handbook, in the belief that it is equally important for retailers.]

A survey recently completed by leaders of the plastics industry as well as another conducted by a leading firm of industrial engineers, reveals that from 1939 to 1947, the dollar volume of plastics is expected to show an increase of 161 per cent as compared with an increase of 41.6 per cent for all industries combined.

From 1929 to 1940, the consumption of plastics increased more than 450 per cent and since 1940 it has almost trebled in volume. The consuming public has made it plain that even this increase is not sufficient to meet its personal, household and office needs. Demands for various plastics applications have prompted manufacturers of raw materials to undertake an expansion of their production facilities which is conservatively estimated to cost over $102,000,000. Provided difficulties in other fields do not interfere too extensively, it is hoped to achieve this expansion during 1946.

The expansion of raw material production will be quickly followed by the appearance of many new plastics items. They have had the scrutiny of engineers and designers and only await the arrival of materials with which to make them.

(*Continued on page* 31)

Neil O. Broderson

CELANESE* PLASTICS

● Look to Celanese plastics for important help in obtaining consumer approval of merchandise. They promote sales because they make friends. Unlimited color, surface lustre and pleasant "touch" are behind the personal appeal of these modern synthetics.

Celanese plastics are *famed for toughness.* High impact strength, tensile strength and mar resistance are inherent. Celanese plastics are *kings of color.* Literally thousands of subtle and brilliant colors are possible in standard formulations. Celanese plastics *offer mass production economies* because they can be molded by the fastest injection and extrusion processes.

Celanese is a pioneer name in the field of synthetics. The ability to supply the *right plastic*

LUMARITH* (special and high acetyl cellulose acetate thermoplastic) Molding Materials

LUMARITH EC (ethyl cellulose thermoplastics) Molding Materials, Sheets, Films, Foils

FORTICEL† (cellulose propionate thermoplastic) Molding Materials, Sheets, Rods, Tubes, Films

VIMLITE* (wire or plastic-mesh reinforced cellulose acetate coated plastic glazing) in rol's

*Reg. U. S. Pat. Off.
†Trademark

Any attempt to list all of the articles known to be on their way to or soon to be ready for stores and shops would be futile. They run into the hundreds. And now that the war is over, the familiar molded and fabricated items will be supplemented by scores of articles where plastics have been used to coat or impregnate other materials to give these materials added qualities and more uses. Non-shrinking and rain-proof materials, handbags and shoes are but a few examples of what may be expected. In addition, a new development in plastics production will make itself felt. Low-pressure molding will bring into the market a wide array of large articles such as boats, stands, beach and lawn furniture, baby strollers, table tops and other items.

A glimpse of what the future has in store will be given during Easter Week (April 22-27) when the First National Plastics Exposition will be held in Grand Central Palace in New York. At that time, it is safe to predict, it will be demonstrated that "Plastics Make A Better World."

ACKNOWLEDGMENTS

The editorial material in this second edition of PLASTICS—A HANDBOOK FOR RETAILERS was prepared by the Society of the Plastics Industry.

The S. P. I. Committee on Plastics Education consists of: Horton Spitzer, chairman, Plaskon Division, Libbey-Owens-Ford Glass Co.; L. M. Amrine, Imperial Molded Products Corp.; Charles A. Breskin, Modern Plastics Magazine; R. V. V. Nichols, McGill University; Frank H. Shaw, Shaw Insulator Co.; and E. A. Stillman, Watson-Stillman Co.

Members of the S. P. I. Committee on Informative Labeling are: D. Gray Maxwell, Waterbury Companies, Inc.; M. A. Brown, Monsanto Chemical Co.; R. H. Cunningham, Bryant Electric Co.; Horace Gooch, Worcester Moulded Plastics Co.; David S. Hopping, Celanese Plastics Corp.; Clayton Shoemaker, Dow Chemical Co.; William T. Stopford, Boonton Molding Co., and William T. Cruse, executive vice-president, S. P. I.

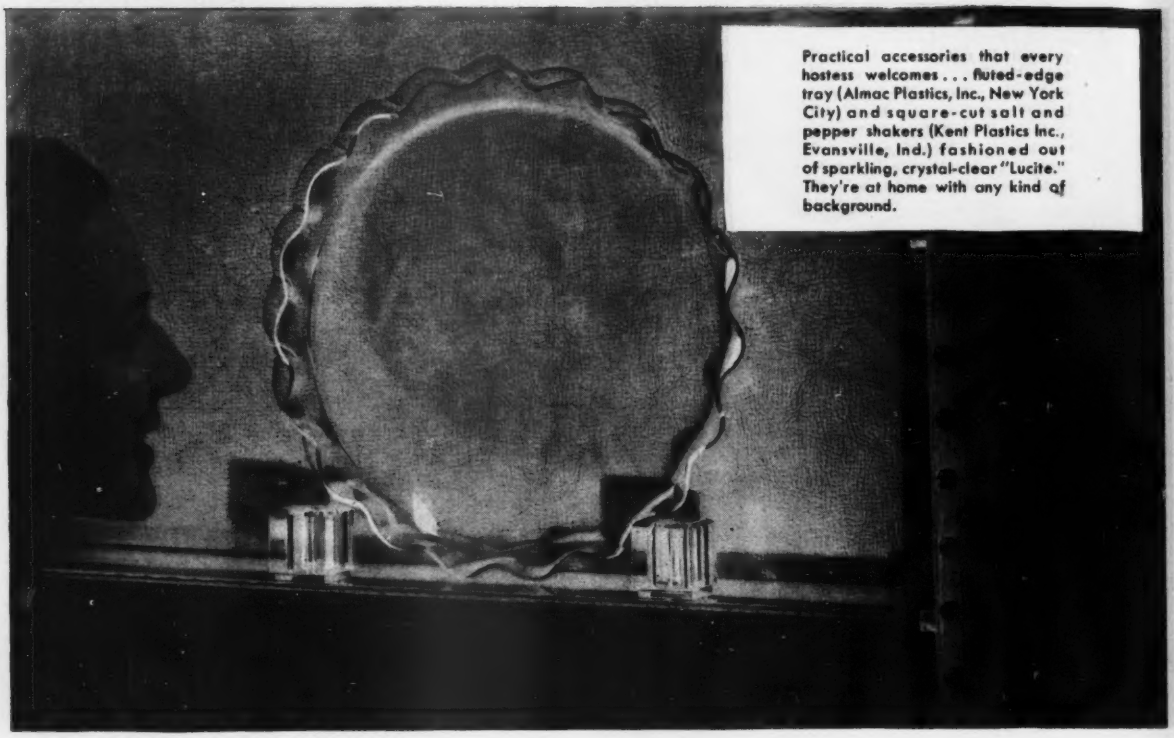
* * *

For photographs special thanks are due to Modern Plastics, Inc., which made available for this purpose the comprehensive picture files of Modern Plastics Magazine and Modern Plastics Encyclopedia; and to the following manufacturers of plastics materials: American Cyanamid Co.; Bakelite Corp.; Catalin Corp.; Celanese Plastics Corp.; Dow Chemical Co.; E. I. duPont de Nemours & Co., Inc.; Durez Plastics & Chemicals, Inc.; Firestone Tire & Rubber Co.; Plaskon Division, Libbey-Owens-Ford Glass Co.; Rohm & Haas Co.; Tennessee Eastman Corp.

* * *

The materials used in producing the articles illustrated on the cover are: 1. Vinyl; 2. Nylon; 3. Acrylic; 4. Cellulose Acetate; 5. Casein; 6. Polystyrene; 7. Vinylidene Chloride; 8. Phenolic; 9. Cellulose Acetate Butyrate; 10. Urea and Melamine; 11. Cellulose Nitrate; 12. Polyvinyl Alcohol.

High gloss black Vinylite (vinyl chloride) makes this set of matched accessories. A quick going-over with a damp cloth is all it needs to keep it new-looking. (Bakelite)



Practical accessories that every hostess welcomes . . . fluted-edge tray (Almac Plastics, Inc., New York City) and square-cut salt and pepper shakers (Kent Plastics Inc., Evansville, Ind.) fashioned out of sparkling, crystal-clear "Lucite." They're at home with any kind of background.

"L[illegible]eans help to the hostess

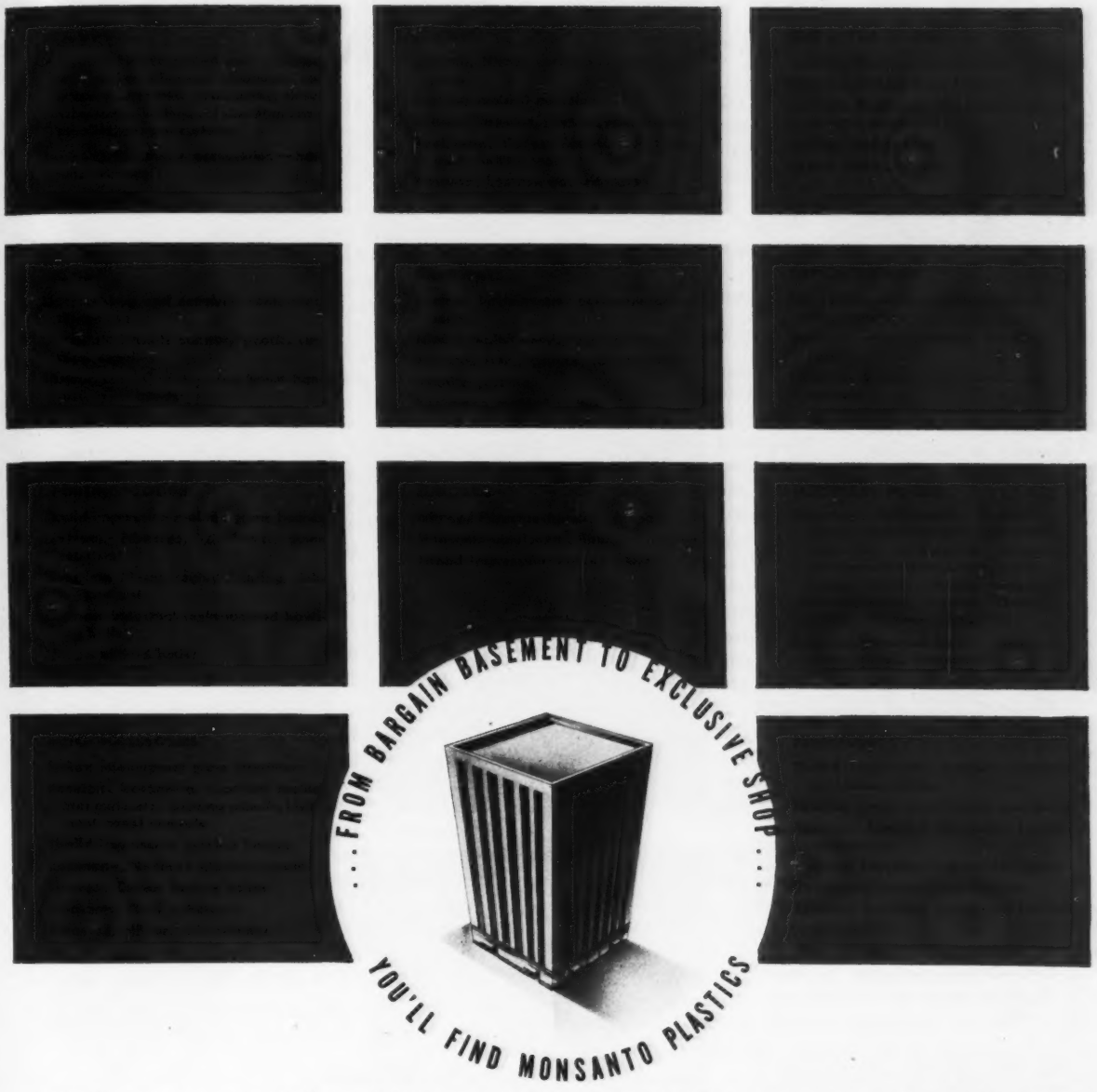
HERE'S a plastic that women *know* . . . for the gleaming, sparkling loveliness it gives to so many articles in the home. The smart hostess can rely on "Lucite" for distinctive, modern decor.

Recognized as a name that stands for lustrous beauty in plastics, Du Pont "Lucite" acrylic resin means more sales for you. Tags and stickers bearing the name "Lucite" will soon be available to manufacturers. Ask for these sales-building aids.

Keep up-to-date on developments in plastics by reading the Du Pont Plastics Bulletin. A note on your letterhead will put you on the mailing list.

E. I. du Pont de Nemours & Co. (Inc.), Plastics Dept. Room 733, Arlington, New Jersey.

Furniture of "Lucite." This plastic is strong as well as good looking. Witness this smartly designed chair, done almost entirely in versatile "Lucite." (Lawrence & Hunter, West Hollywood, Calif.)



. . . And every smart retailer today knows VUEPAK, the rigid, transparent packaging material.

It would be impossible, of course, to list all of the 13,000 and more uses to which we know Monsanto's versatile family of plastics have been put. But even this abbreviated presentation may amaze you.

You'll find this number increasing almost daily, too, as Monsanto's plastics research adds new qualities to the materials, and as America's molders, manufacturers and designers show ever greater ingenuity.

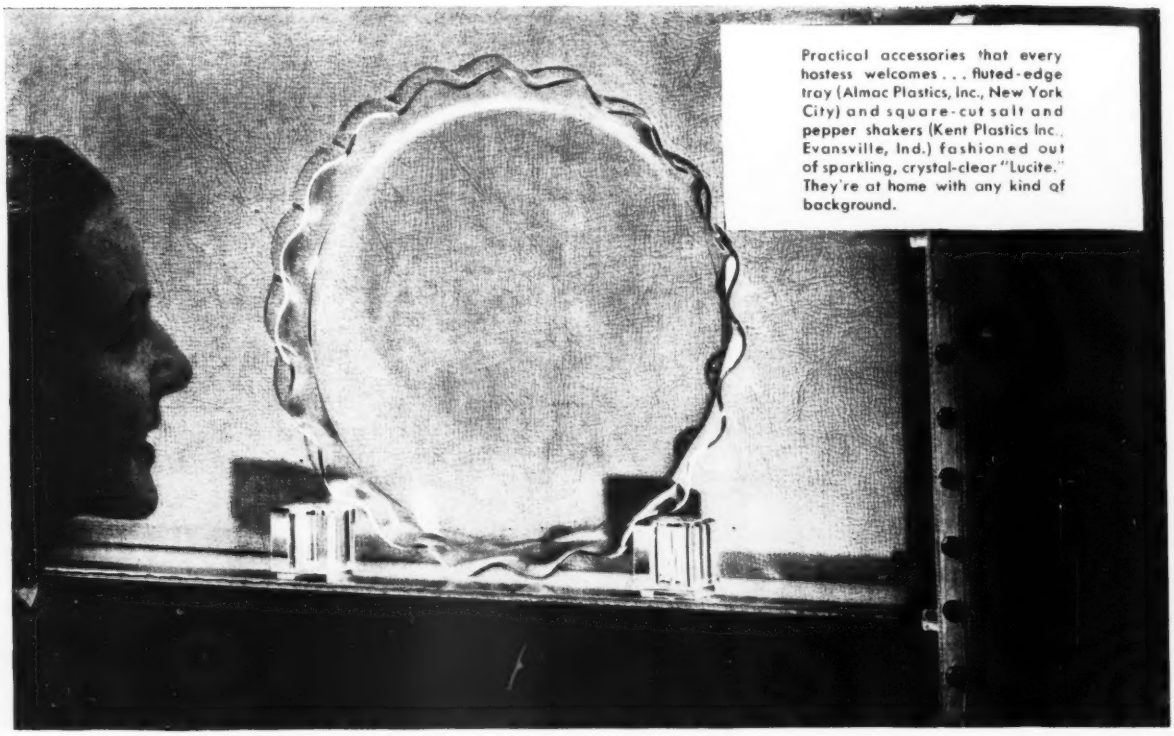
Correctly applied, no other material offers so much color, beauty, sleek styling plus so much performance quality as does plastic. None, indeed, excites such buyer enthusiasm!

Why *Monsanto* Plastics

Because its family of plastics is so broad, Monsanto is under no compulsion to recommend any certain kind of plastic for all applications; molders and fabricators find at Monsanto, "not every kind of plastic but a plastic for every job." As a result buyers of Monsanto plastic products have the opportunity to enjoy the maximum of performance for their plastic dollar.

As a further result many retailers today find out if it's a Monsanto plastic before they buy . . . and then sell it with confidence and pride. For information to help you buy and sell plastics better, address: MONSANTO CHEMICAL COMPANY, Plastics Division, Springfield 2, Massachusetts.

MONSANTO
PLASTICS
SERVING INDUSTRY . . . WHICH SERVES MANKIND



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MONSANTO PLASTICS

SERVING INDUSTRY . . . WHICH SERVES MANKIND

PLASTICS MATERIALS

The massive costume jewelry styles of the day would not be possible except for the light weight of the colorful plastics used. This necklace is fabricated of Lumarith CA (cellulose acetate) (Celanese Plastics.)

TO date, about 30 basic plastics products have been developed which lend themselves to hundreds of formulations. Hence, it is possible to produce materials which are actually "tailor-made" for the purpose to which they will be put. Meanwhile chemists and engineers are continuing their research and there is sound reason for believing they will develop many additional plastics materials which will be put to thousands of uses.

Plastics are divided into two general types—thermosetting and thermoplastic resins. Thermo means heat, hence the thermosetting group are those plastics which set or harden into permanent shape when heat and pressure are applied to them. Conversely, the thermoplastic group comprises those that are softened by heat and hardened into shape by cooling.

Until recently a thermoplastic material has been unsuited for any application involving a temperature of 160° F. or higher. Recent research and experimentation in the thermoplastic field, however, indicate that in the future there may be less distinction between the two basic types.

Both of the major types mentioned above have significant characteristics. They are light in weight yet have high strength in proportion to their weight. They are warm to touch. Many have good electrical properties and some can be produced in a wide range of colors which completely permeate finished articles.

Thermosetting plastics in general use include Allyl Esters; Amino: Melamine-Formaldehyde, Urea-Formaldehyde; Aniline Formaldehyde; Phenol Formaldehyde; Phenol-Furfural; Casein.

Thermoplastic plastics are: Acrylics; Cellulose Acetate; Cellulose Acetate-Butyrate; Cellulose Nitrate; Ethyl Cellulose; Polyamides; Polyethylene; Polystyrene; Polyvinyl Alcohol; Shellac; Vinyl Acetate; Vinyl Butyral; Vinyl Chloride; Vinyl Chloride-Acetate; Vinylidene Chloride.

In addition to the foregoing thermosetting and thermoplastic materials, there are two plastics used for cold molding—Refractory and Non-refractory, as well as an important group of rubber-like plastics.

THERMOSETTING PLASTICS

Allyls

These are a distinctly new type of thermosetting plastics derived from allyl alcohol. They are the nearest approach to glass yet produced by the plastics industry and have greater surface hardness than other transparent plastics. Other characteristics include strength, flexibility and general resistance to deteriorating influences.

Trade Names: *Allymer, Kriston, MR Resins.

Aminos

These include both urea-formaldehyde and melamine-formaldehyde. They belong in the thermosetting group and are especially noted for their pastel shades, color stability and electrical characteristics.

MELAMINES are one of the newer classes of thermosetting resins, closely related in composition and characteristics to the ureas. They are derived from calcium cyanamid reacted with formaldehyde. They possess excellent electrical properties, have great resistance to moisture, and good surface hardness. Like ureas, they have unlimited color range which is light-fast, and are odorless and tasteless. Typical uses are: in molded form as tableware, buttons and ignition parts; in liquid form they are widely used in the treatment of wet strength paper, crease-proofing of textiles, and to reduce textile shrinkage. They are also used as laminating resins.

Trade Names of molded melamine are: Melmac, Plaskon, Resimene.

UREAS are derived by combining urea and formaldehyde through a condensation process and are available as molding compounds, laminating resins, glues, surface coatings, paper-treating resins and for numerous industrial uses. Many of their characteristics are similar to phenolics. They have unlimited color range and are light-fast, are odorless and tasteless, and have good resistance to acids and alkalies. Typical uses are: clock cases, scale housings, radio cabinets, lighting equipment such as commercial and floor lamp reflectors, cosmetic jars, hardware, electrical devices, buttons, tableware, electric razors, and closures.

Trade Names for urea molding materials are: Bakelite, Beetle, Plaskon and Sylplast.

Aniline-Formaldehydes

This is one of the early thermosetting materials to be developed. Produced by the condensation of formaldehyde and aniline, it is not soluble in any common organic solvents nor affected by alkalies. It is especially resistant to alcohol but is affected by strong acids. It has high insulation properties and is not easily affected by weather. It is available as molding powder or in sheets and rods. The radio and television fields use it extensively, and it has many applications in aircraft, antennae housings, tube bases, terminal boards and electrical devices.

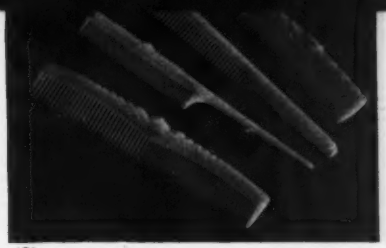
Trade Names: Cibanite, Dilectene.

Caseins

These are produced from the protein of skim milk, reacted with formaldehyde. They are available only in sheets, rods and tubes for the production of items

*All trade names are those of raw materials produced and sold commercially. No attempt has been made to include all materials or present a complete trade listing.

(1)



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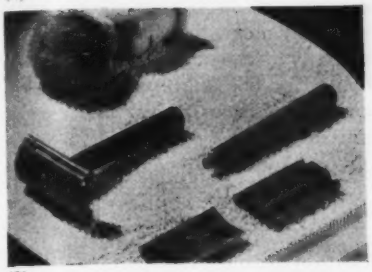

(3)

(4)

(6)

(5)

(7)

(8)

(1) Clear Plexiglas (acrylic) is ingeniously molded into a book-shaped compact with space for powder and lipstick. The sealed-in flower decoration showing through the cover is a strip of cardboard backed paper with the mirror cemented to it. (Rohm & Haas; Lentheric) (2) Combs of molded nylon are tough and durable and don't go out of shape at high temperatures. (Du Pont) (3) A lightweight, shatterproof razor made of Lumarith CA (cellulose acetate). (Celanese Plastics Corp.; California Plastic Products Co.) (4) Translucent, but not too candidly transparent, this cocktail bag is made of Lumarith CA (cellulose acetate) in brilliant colors, is fitted with a matching compact. (Celanese Plastics Corp.; Allied Plastics) (5) Colorful, lightweight, inexpensive cigarette lighters are fabricated of Catalin (cast phenolic). (Catalin Corp.; J. J. Sperans.) (6) An electric motor, air cooled through louvres in the back of the cabinet, powers this home manicure machine for filing, buffing and massage. Factory tests of the machine, called the Beautiator, indicate it will give trouble-free performance for at least 20 years. Equally durable is the Beetle (molded urea) cabinet with its permanent color and hard, glossy surface. (American Cyanamid; Abar Mfg. Co.) (7) Clogs, injection molded of Tenite I (cellulose acetate) and Tenite II (cellulose acetate butyrate). (Tennessee Eastman) (8) Vinylite (vinyl chloride) sheeting is used for uppers and soles on high-style shoes. The shoe in the center is made from a Vinyon net. The vinyl materials are water-resistant. (Bakelite)

(9)

(9) This exquisite ivory brocade is woven of Velon (vinylidene chloride), and its glamour is not perishable. It is long-wearing, snag-resistant, and color-permanent, and spots and stains can be wiped off it with a damp cloth. The supply of dress fabrics made from Velon yarn is still limited and high-priced; but eventually it will be more widely available. (Firestone; Hafner) (10) Handbag designed by Josef, of Josefaille with a frame of simulated tortoise shell made of Lumarith CA (cellulose acetate). (Celanese Plastics Corp.; Modern Plastics Mfg. Co.)

(10)

(1)

(2)

(3)

(4)

(1) Lightweight, non-warping camera cases are molded from Bakelite general-purpose phenolics because of the material's dimensional stability. (2) Lumarith EC (ethyl cellulose) is a tough material that keeps its resiliency even at exceptionally low temperatures. This right-angle flashlight is light weight and so precisely molded that parts can easily be interchanged with other units. (Celanese Plastics Corp.; Gits Molding Corp.) (3) This wrist compass, completely molded of Lumarith CA (cellulose acetate), is now being produced for civilians. When the directional dial comes to a stop the direction in which the user is facing appears at the point of a white line under which the phrase, "You are looking" is stamped on the base. (Celanese Plastics Corp.; DuPage Plastics Co.; Harold S. Schwartz & Associates) (4) The stock, foreend and sight-piece of this shotgun are molded of cellulose acetate with a surface effect resembling burled walnut. (Tennessee Eastman) (5) One of the earliest applications of Saran (vinylidene chloride) was a monofilament used in fishing leaders. The tough, wiry material has absolute water resistance. Today braided strands of Saran make perfect clothes-lines, which will not sag or rot and can be wiped clean with a cloth wrung out in soapy water. (Dow)

(5)

to be cut or machined into finished form. They are easily fabricated, have good lustre and a wide color range, but absorb water readily and lack dimensional stability under long exposure to high humidity. Plastics made of agricultural products, such as soy beans, are produced by a similar means but are not expected to become commercially important until further research and experimentation has been completed. Typical uses of casein plastics are: buttons, novelty jewelry, buckles, toys and accessories.

Trade Names: Ameroid, Galorn.

Phenolics

These are thermosetting, synthetic compounds derived from coal tar acids and capable of withstanding much higher temperatures than most thermoplastics. They are divided into four general groups: ordinary phenolics to which fillers are added and then molded by compression or transfer; cast phenolics; casting resins, and laminating resins.

Phenolics are more widely used by molders than any other plastics, but they are also employed extensively in adhesives, paints, varnishes and abrasives, as well as for casting and laminating. By adding different types of fillers such as wood flour, chopped fabric, mica, asbestos and the like, molding compounds are produced from which an extensive array of articles with a wide variety of properties can be molded. Finished articles are light in weight, resistant to alcohol, have good surface appearance and excellent electrical properties. Familiar products include: telephone hand sets, electrical switch parts, coffee pot handles, business machine cases or housings, buttons, closures, containers, gears, and bearings.

When casting is employed as the manufacturing process, it has been found that several colors can be employed, producing unusual effects resembling marble or onyx. Cast products are resistant to average oils, acids and alcohol, also to moisture, but will soften slightly and whiten in hot water. Typical cast forms are: clock cases, tooling and forming dies, knife handles, radio cabinets, decorative trim, dice, dominoes, poker chips and costume jewelry.

Trade Names of phenolic molding compounds are: Bakelite, Durez, Durite, Indur, Makalot, Resinox.

Trade Names of casting resins include: Catalin, Durez, Marblette.

Trade Names of cast phenolics include: Bakelite, Catalin, Gemstone, Marblette, Prystal.

Phenol-Furfurals

Phenol-Furfural resins are in many ways similar in physical properties to the phenol formaldehydes. The furfurals are of special interest as they are obtained from waste farm products such as oat hulls, corn cobs, etc. Dark in color, they possess excellent moldability because of flow and curing characteristics. Typical applications are: aircraft pulleys, radio cabinets, camera parts, abrasive grinding wheels, and electrical parts.

Trade Name: Durite.

(*Continued on page* 42)

PLASTICS FOR THE CONSUMER

[Revised Edition, March, 1946]

The preparation of a chart such as this one involving a variety of materials is no simple assignment, as those who participated in its compilation know only too well. The purpose of the chart is to serve primarily as a guide. The ratings of the properties included are typical. Frequently, through special compounding the properties may be varied to meet special conditions. It is pointed out that each column represents a complete family of plastics which in itself has a wide variation of characteristics. Plastics consumers goods are made in various ways, including molding, fabricating, extrusion, etc. These methods may also have a bearing upon the properties of the finished piece.

Inasmuch as there are both rigid and non-rigid types of plastics, the chart is divided into two parts.

In using the chart, it should be kept in mind that all properties must be evaluated in considering a particular application. In some cases, color will be important, in others, heat resistance, in another, toughness or rigidity will be a factor. As in metals, a selection must be made on the basis of the end use.

It also must be kept in mind that research and development work is continuously in process on the various materials and on new types.

It is important, and you will find it invaluably helpful, to rely upon the knowledge of your supplier of plastics products for information and assistance. "One can't learn to play a piano in one easy lesson," neither can a chart, however well prepared, offer a complete course in plastics. If the chart serves as a primary reference, its preparation will have been justified.

PLASTI

THERMOSETTING

RIGID TYPES		PHENOLIC			AMIN		
FORM or CLASS		CAST RESIN	MOLDED COMPOUND	LAMINATED	MOLDED UREAS	MOLDED MELAMINES	LA TR
TRADE NAMES (Raw Materials)		BAKELITE CATALIN MARBLETTE PRYSTAL	BAKELITE CO-RO-LITE DUREZ DURITE HERESITE INDUR INSUROK MAKALOT NEILLITE TEXTOLITE	CELERON DILECTO FORMICA INSUROK LAMICOID MICARTA PANELYTE PHENOLITE SPAULDITE SYNTHANE TEXTOLITE	BAKELITE BEETLE PLASKON SYLPLAST	MELMAC PLASKON RESIMENE	FC LA TE
Ratings in Principal Properties BASIS: **10 is best, 6 is suitable**	**STRENGTH** To Withstand Impacts of Ordinary Use	7 HARD & RIGID	7 HARD & RIGID HIGH IMPACT GRADES AVAILABLE	10 HARD & TOUGH	6 HARD & RIGID	7 HARD & RIGID	H
	Resistance to Effects of **WATER** or Water Vapor	9	8	9	6	9	
	Resistance to Effects of Outdoor **EXPOSURE**	5 DARKENS IN SUNLIGHT	7 SURFACE CHALKS SLIGHTLY	7	5 CHECKS AND CRACKS	7	
	* Resistance to Adverse Effects of **HEAT** or High Temperature	8 HARDENS & CHECKS	10 250° TO 400° F	10 250° TO 400° F	8 TO 170° F	9 TO 210° F	
	Resistance to Adverse Effects of **HOUSEHOLD CHEMICALS**	9 AVOID ALKALIS	8 AVOID ALKALIS	8 AVOID STRONG ALKALIS	7 AVOID STRONG ACIDS AND ALKALIS	8 AVOID STRONG ACIDS AND ALKALIS	AVOI
	Resistance to **SOLVENTS** Found in Cleaning Fluids, Paints & Varnishes	10	10	10	10	10	
	‡ Range of **COLOR**	9	7	7	8	8	
	‡ Brilliance of **COLOR**	9	5 OPAQUE ONLY	6	9	8	
	‡ **CLARITY OR TRANSPARENCY**	6	—	—	—	—	
PRECAUTIONS		SURFACE DARKENS AND DISCOLORS ON AGING	NOT AVAILABLE IN PASTEL COLORS		SENSITIVE TO WATER AND HEAT		SC A
TYPICAL USES		**AS MACHINED PARTS** Buttons & Buckles Cases: Clock & Radio, Small Chessmen Costume Jewelry Desk Articles Dice & Dominoes Jukebox Trim Knobs & Handles Pipe Bits Religious Goods	**AS MOLDED PARTS** Bottle Caps Buttons Cases: Clock, Radio & Camera Caster Wheels Containers and Boxes, Small Dispensing Devices Display Items Electrical Appliances and Wiring Devices Hearing Aids Instrument Cases Knobs & Handles Pencils Radio Parts Razors Safety Goggles Safety Helmets Surgical Instruments Telephone Equipment Thermos Bottle Caps Toys Trays	**AS FORMED OR FABRICATED SHEETS, RODS OR TUBES** Caster Wheels Display Items Electrical Appliances & Insulation Radio Parts Refrigerator Door Liners Refrigerator Breaker Strips Safety Helmets Telephone Equipment Trays	**AS MOLDED PARTS** Bottle Caps Buckles Buttons Cases: Clock and Radio Containers and Boxes, Small Coasters Cosmetic Containers Dispensing Devices Display Items Electrical Appliances and Wiring Devices Kitchenware Knobs & Handles Lighting Reflectors Religious Goods Salt, Pepper Shakers Scoops Tableware Thermos Caps Toys Trays	**AS MOLDED PARTS** Buttons Electrical Insulation Tableware Trays	A Ligh Sign

ICS FOR

AMINO			e	Casein
ES	LAMINATED TRANSLUCENT	LAMINATED OPAQUE	CELLULOSE NITRATE	
	UREAS OR MELAMINES			
	FORMICA LAMICOID TEXTOLITE	DAYSTROM FARLITE FORMICA MICARTA PANELYTE PARKWOOD REALWOOD TEXTOLITE	AMERITH CELLULOID NITRON NIXONOID PYRALIN	AMEROID GALORN
GID	7 HARD & RIGID	9 HARD SURFACE	10 TOUGH AND RESILIENT	7 HORNLIKE
	8	9	9	5 ABSORBS
	7	6	6 DISCOLORS UNLESS PIGMENTED	5 SHORT EXPOSURE SATISFACTORY
F	9 160° F—200° F	9 TO 220° F	6 TO 160° F. COMBUSTIBLE	8 SOFTENS AT 200° F
G ACIDS ALIS	7 AVOID STRONG ACIDS AND ALKALIS	8 AVOID STRONG ACIDS AND ALKALIS	8 AVOID ALKALIS	5 AVOID ACIDS AND ALKALIS
	10	10	9 AVOID STRONG ALCOHOL	10
	8	7	10	9
	8	7	9	9
	—	—	8	6
	SOME GRADES SENSITIVE TO HEAT ABOVE 160° F		BURNS VIGOROUSLY WHEN IGNITED	

AS FORMED OR FABRICATED SHEETS

Lighting Fixtures
Signs, Illuminated

AS SHEETS VENEERED ON PLYWOOD OR FIBERBOARD

Architectural Trim, Panels
Tops for Tables, Counters, Dinettes, Kitchen Work Surfaces, & Bars

MOLDED OR FABRICATED

Refrigerator Door Linings & Breaker Strips

FORMED OR FABRICATED SHEET, FILM, ROD OR TUBE

Artificial Limbs
Brushes, Buckles
Coverings: Toilet Seat, Hamper Top, Chart Cases
Dice, Dominoes, Dolls, Drafting Instruments
Fountain Pens, Golftee
Hairpins, Handles
Mallets, Movie Film
Novelties, Pencils
Piano Keys, Printed Items
Ping-Pong Balls
Protective Covers
Shoe: Heel Covers, Horns, Shoe Lace Tips
Soap Dishes, Spectacle Frames, Store Price Signs, Transparent Windows, Tool Handles, Toys
Umbrella Handles

MACHINED PARTS

Buckles
Buttons
Cigarette Holders
Crochet Hooks
Knitting Needles
Notions

Notes on Chart Values

✻ Some plastics will withstand intermittent heat, others prolonged exposures. The conditions the applications will be exposed to must therefore be taken into account.

‡ In evaluating the colors the following system was used:

I. **Range of color:** #6 was assigned to material available only in opaque plain colors; one point was added for each additional range factor. Their factors being (a) transluscency, (b) transparency, (c) availability of mottle, (d) geometric configurations.

II. **Brilliance of color:** #10 was assigned to transparent plastics having a water white base capable of accepting any color ingredient without modifying its color; one point was deducted for each of the following reasons: (a) slightly dulled, (b) dulled, (c) seriously dulled. Additional points were subtracted for transluscency and opacity because of their effect on the depth of color.

III. **Clarity and/or transparency:** Rated on a comparative basis depending upon their light transmission and haze value.

Prepared by

THE SOCIETY OF THE PLASTICS INDUSTRY, INC.

295 Madison Avenue
New York 17, N. Y.

PLASTI

THERMOSETTING

RIGID TYPES		PHENOLIC			AMIN		
FORM or CLASS		CAST RESIN	MOLDED COMPOUND	LAMINATED	MOLDED UREAS	MOLDED MELAMINES	T
TRADE NAMES (Raw Materials)		BAKELITE CATALIN MARBLETTE PRYSTAL	BAKELITE CO-RO-LITE DUREZ DURITE HERESITE INDUR INSUROK MAKALOT NEILLITE TEXTOLITE	CELERON DILECTO FORMICA INSUROK LAMICOID MICARTA PANELYTE PHENOLITE SPAULDITE SYNTHANE TEXTOLITE	BAKELITE BEETLE PLASKON SYLPLAST	MELMAC PLASKON RESIMENE	
Ratings in Principal Properties BASIS: 10 is best, 6 is suitable	**STRENGTH** To Withstand Impacts of Ordinary Use	7 HARD & RIGID	7 HARD & RIGID HIGH IMPACT GRADES AVAILABLE	10 HARD & TOUGH	6 HARD & RIGID	7 HARD & RIGID	
	Resistance to Effects of **WATER** or Water Vapor	9	8	9	6	9	
	Resistance to Effects of Outdoor **EXPOSURE**	5 DARKENS IN SUNLIGHT	7 SURFACE CHALKS SLIGHTLY	7	5 CHECKS AND CRACKS	7	
	* Resistance to Adverse Effects of **HEAT** or High Temperature	8 HARDENS & CHECKS	10 250° TO 400° F	10 250° TO 400° F	8 TO 170° F	9 TO 210° F	
	Resistance to Adverse Effects of **HOUSEHOLD CHEMICALS**	9 AVOID ALKALIS	8 AVOID ALKALIS	8 AVOID STRONG ALKALIS	7 AVOID STRONG ACIDS AND ALKALIS	8 AVOID STRONG ACIDS AND ALKALIS	AV
	Resistance to **SOLVENTS** Found in Cleaning Fluids, Paints & Varnishes	10	10	10	10	10	
	‡ Range of **COLOR**	9	7	7	8	8	
	‡ Brilliance of **COLOR**	9	5 OPAQUE ONLY	6	9	8	
	‡ **CLARITY OR TRANSPARENCY**	6	—	—	—	—	
PRECAUTIONS		SURFACE DARKENS AND DISCOLORS ON AGING	NOT AVAILABLE IN PASTEL COLORS		SENSITIVE TO WATER AND HEAT		
TYPICAL USES		**AS MACHINED PARTS** Buttons & Buckles Cases: Clock & Radio, Small Chessmen Costume Jewelry Desk Articles Dice & Dominoes Jukebox Trim Knobs & Handles Pipe Bits Religious Goods	**AS MOLDED PARTS** Bottle Caps Buttons Cases: Clock, Radio & Camera Caster Wheels Containers and Boxes, Small Dispensing Devices Display Items Electrical Appliances and Wiring Devices Hearing Aids Instrument Cases Knobs & Handles Pencils Radio Parts Razors Safety Goggles Safety Helmets Surgical Instruments Telephone Equipment Thermos Bottle Caps Toys Trays	**AS FORMED OR FABRICATED SHEETS, RODS OR TUBES** Caster Wheels Display Items Electrical Appliances & Insulation Radio Parts Refrigerator Door Liners Refrigerator Breaker Strips Safety Helmets Telephone Equipment Trays	**AS MOLDED PARTS** Bottle Caps Buckles Buttons Cases: Clock and Radio Containers and Boxes, Small Coasters Cosmetic Containers Dispensing Devices Display Items Electrical Appliances and Wiring Devices Kitchenware Knobs & Handles Lighting Reflectors Religious Goods Salt, Pepper Shakers Scoops Tableware Thermos Caps Toys Trays	**AS MOLDED PARTS** Buttons Electrical Insulation Tableware Trays	Lig Sig

TICS FOR THE CONS

THERMOPLASTIC

AMINO		CELLULOSIC				Acrylics	Polys
LAMINATED TRANSLUCENT	LAMINATED OPAQUE	CELLULOSE NITRATE	CELLULOSE ACETATE	CELLULOSE ACETATE BUTYRATE	ETHYL CELLULOSE		
UREAS OR MELAMINES							
FORMICA LAMICOID TEXTOLITE	DAYSTROM FARLITE FORMICA MICARTA PANELYTE PARKWOOD REALWOOD TEXTOLITE	AMERITH CELLULOID NITRON NIXONOID PYRALIN	BAKELITE CHEMACO FIBESTOS KODAPAK LUMARITH-CA NIXONITE PLASTACELE TENITE I VUEPAK	HERCOSE TENITE II	ETHOCEL ETHOFOIL LUMARITH LUMARITH E.C NIXON E.C.	LUCITE PLEXIGLAS	BAK CERE LOA LUST POLY STYR STYR STYRO
7 HARD & RIGID	9 HARD SURFACE	10 TOUGH AND RESILIENT	9 TOUGH AND RESILIENT	9 TOUGH AND RESILIENT	10 TOUGH & RESILIENT EVEN WHEN COLD	7 TOUGH & RIGID	7 HARD &
8	9	9	7	8	8	10	1
7	6	6 DISCOLORS UNLESS PIGMENTED	9	9	7	10	6 YELLO CHE
9 160° F—200° F	9 TO 220° F	6 TO 160° F. COMBUSTIBLE	8 135° F—170° F	8 135° F—170° F	8 135°-180° F.	9 170° to 200° F. SOME TYPES WITHSTAND 225° F.	8 CERTAIN TY STAND OV
7 AVOID STRONG ACIDS AND ALKALIS	8 AVOID STRONG ACIDS AND ALKALIS	8 AVOID ALKALIS	6 AVOID STRONG ACIDS AND ALKALIS	6 AVOID STRONG ACIDS AND ALKALIS	7 AVOID ACIDS	9	9 AVO CITRUS
10	10	9 AVOID STRONG ALCOHOL	8 AVOID ALCOHOL AND PAINT REMOVER	7 AVOID ALCOHOL, PAINT REMOVER	5 AVOID OILS, FATS, TURPS, CLEANERS, ALCOHOL	9 AVOID PAINT REMOVER AND STRONG ALCOHOL	6 AVOID PAIN CLEA
8	7	10	10	9	9	9	8
8	7	9	9	9	7	10	9
—	—	8	8	8	7	10	9
SOME GRADES SENSITIVE TO HEAT ABOVE 160° F		BURNS VIGOROUSLY WHEN IGNITED	SLIGHT SHRINKAGE OR WARPING ON AGING OF THE SOFTER COMPOUNDS		SENSITIVE TO OILS, FATS AND SOLVENTS		
AS FORMED OR FABRICATED SHEETS Lighting Fixtures Signs, Illuminated	**AS SHEETS VENEERED ON PLYWOOD OR FIBERBOARD** Architectural Trim, Panels Tops for Tables, Counters, Dinettes, Kitchen Work Surfaces, & Bars **MOLDED OR FABRICATED** Refrigerator Door Linings & Breaker Strips	**FORMED OR FABRICATED SHEET, FILM, ROD OR TUBE** Artificial Limbs Brushes, Buckles Coverings: Toilet Seat, Hamper Top, Chart Cases Dice, Dominoes, Dolls, Drafting Instruments Fountain Pens, Golftees Hairpins, Handles Mallets, Movie Film Novelties, Pencils Piano Keys, Printed Items Ping-Pong Balls Protective Covers Shoe: Heel Covers, Horns, Shoe Lace Tips Soap Dishes, Spectacle Frames, Store Price Signs, Transparent Windows, Tool Handles, Toys Umbrella Handles	**MOLDED PARTS** Automobile Hardware Barrettes, Bobby Pins Beads, Beer Scrapers Bracelets, Buckles Cigarette Boxes, Clothes Pins, Coat Hangers, Compacts, Combs, Cocktail Picks, Costume Jewelry, Crochet Hooks, Curtain Fixtures Darning Eggs, Display Boxes, Dolls, Dresser Sets Earrings Fishbait, Flashlight Cases Garter Clasps, Goggles, Golftees Hearing Aids, Oil Cans Measuring Cups, Pencils, Powder & Rouge Boxes Razors, Scoops Salt & Pepper Shakers Steering Wheels **EXTRUDED OR BLOWN** Christmas Tree Ornaments Edge Trim for Furniture and Stairs **SHEET, FILM, FOIL** Containers, Cosmetic Boxes Display Boxes, Lamp Shades Packaging, Novelties, Windows Safety Photo or Movie Film	**MOLDED PARTS** Same as for Cellulose Acetate **EXTRUDED SHAPES** Same as for Cellulose Acetate	**MOLDED PARTS** Military Applications **EXTRUDED SHAPES** Same as for Cellulose Acetate **COATING ON PAPER** Catalog Covers Packaging Papers **SHEET, FILM FOIL** Transparent Containers	**FABRICATED SHEET, TUBE AND ROD** Beads, Bracelets Compacts, Costume Jewelry, Dials, Dresser Sets, Display Boxes & Supports Eyeshields Furniture and Trim Glazing Handbag Frames and Ornaments Picture Frames Signs, Illuminated Table Accessories Umbrella Handles Watch Crystals **MOLDED PARTS** Artificial Eyes Automobile Ornaments Boxes: Cigarette, Jewel, Display Buttons, Buckles Comb and Brush Backs, Contact Lenses, Cosmetic Containers, Dentures Flashlight Lenses, House Numerals, Instrument Dials & Covers, Optical Lenses, Reflector Buttons, Table Accessories, Tumblers Tooth Brush Handles	MOL PA Automobile and Dials Bathroom Bottles Bottle Caps Chemical Combs Cosmetic Costume Je Display Box Kitchen Ac Lighting Fix Lipstick Ho Novelties Photograph Equipme Radio Cabi Radio Insul Radio Knob Refrigerato Salt and Pe Toys

E CONSUM

THERMOPLASTIC

IC		Acrylics	Polystyrene	VIN
LULOSE E BUTYRATE	ETHYL CELLULOSE			VINYL CHLORIDE CO-POLYMERS
RCOSE NITE II	ETHOCEL ETHOFOIL LUMARITH LUMARITH E.C NIXON E C.	LUCITE PLEXIGLAS	BAKELITE CEREX LOALIN LUSTRON POLYFLEX STYRALOY STYRAMIC STYRON	VINYLITE
9 UGH AND SILIENT	10 TOUGH & RESILIENT EVEN WHEN COLD	7 TOUGH & RIGID	7 HARD & RIGID	8 TOUGH & RIGID
8	8	10	10	10
9	7	10	6 YELLOWS AND CHECKS	7 TENDS TO DARKEN
8 F—170° F	8 135°-180° F.	9 170° to 200° F. SOME TYPES WITHSTAND 225° F	8 CERTAIN TYPES WITHSTAND OVER 212° F	7 130° TO 145° F
6 STRONG ACIDS D ALKALIS	7 AVOID ACIDS	9	9 AVOID CITRUS JUICE	10
7 D ALCOHOL, T REMOVER	5 AVOID OILS, FATS, TURPS, CLEANERS, ALCOHOL	9 AVOID PAINT REMOVER AND STRONG ALCOHOL	6 AVOID PAINT REMOVER, CLEANERS	9 AVOID PAINT REMOVER AND CARBON TET.
9	9	9	8	9
9	7	10	9	9
8	7	10	9	7
	SENSITIVE TO OILS, FATS AND SOLVENTS			
OLDED PARTS for ose Acetate **TRUDED HAPES** for ose Acetate	**MOLDED PARTS** Military Applications **EXTRUDED SHAPES** Same as for Cellulose Acetate **COATING ON PAPER** Catalog Covers Packaging Papers **SHEET, FILM FOIL** Transparent Containers	**FABRICATED SHEET, TUBE AND ROD** Beads, Bracelets Compacts, Costume Jewelry, Dials, Dresser Sets, Display Boxes & Supports Eyeshields Furniture and Trim Glazing Handbag Frames and Ornaments Picture Frames Signs, Illuminated Table Accessories Umbrella Handles Watch Crystals **MOLDED PARTS** Artificial Eyes Automobile Ornaments Boxes: Cigarette, Jewel, Display Buttons, Buckles Comb and Brush Backs, Contact Lenses, Cosmetic Containers, Dentures Flashlight Lenses, House Numerals, Instrument Dials & Covers, Optical Lenses, Reflector Buttons, Table Accessories, Tumblers Tooth Brush Handles	**MOLDED PARTS** Automobile Knobs and Dials Bathroom Fixtures Bottles Bottle Caps and Pourers Chemical Containers Combs Cosmetic Containers Costume Jewelry Display Boxes Kitchen Accessories Lighting Fixtures Lipstick Holders Novelties Photographic Equipment Radio Cabinets Radio Insulators Radio Knobs Refrigerator Knobs Salt and Pepper Shakers Toys	**EXTRUDED SHAPES AND FILAMENTS** Edge Trim Woven Handbags, Woven Upholstery, Woven Window Screens **SHEET, FILM AND FOIL** Cards, Drafting Instruments, Eye Shades & Protectors, Lighting Fixtures, Phonograph Recording Disks, Packaging **MOLDED PARTS** Closures Combs Phonograph Records Toothbrush Handles

MER

VINYL		Polyamide	Casein
HLORIDE MERS	VINYLIDENE CHLORIDE		
TE	GEON SARAN	NYLON	AMEROID GALORN
& RIGID	8 TOUGH AND WIRY	10 TOUGH AND ELASTIC: SINEWY	7 HORNLIKE
)	10	8	5 ABSORBS
TO EN	7 TENDS TO DARKEN	8	5 SHORT EXPOSURE SATISFACTORY
145° F	8 150° TO 180° F	10 TO 320° F AT LOW LOAD	8 SOFTENS AT 200° F
)	10	9 AVOID STRONG ACIDS	5 AVOID ACIDS AND ALKALIS
T REMOVER BON TET.	10	10	10
)	7	7	9
)	7	7	9
	—	—	6
		EMBRITTLES AT CONTINUOUS HIGH TEMPERATURES	
RUDED ES AND MENTS im Handbags, Upholstery, Window ns **T, FILM D FOIL** Drafting ents, Eye & Protectors, Fixtures, raph Recording ackaging **ED PARTS** raph Records rush Handles	**EXTRUDED TUBE AND FILAMENTS** Belts & Suspenders Cordage & Rope Fishline Pipe & Tube for Air, Water, Fuel & Chemicals Upholstery Woven Window Screens **FILM & FOIL** Furniture Webbing, Packaging, Metal Parts **MOLDED PARTS** Chemical Wares Fittings for Pipe and Tube	**EXTRUDED SHAPES AND FILAMENTS** Bristles for Brushes of All Sorts: Hairbrushes Paint Brushes Tooth Brushes Cordage & Rope Fishlines Window Screens **MOLDED PARTS** Electrical Devices	**MACHINED PARTS** Buckles Buttons Cigarette Holders Crochet Hooks Knitting Needles Notions

Notes on Chart Values

✻ Some plastics will withstand intermittent heat, others prolonged exposures. The conditions the applications will be exposed to must therefore be taken into account.

‡ In evaluating the colors the following system was used:

I. **Range of color:** #6 was assigned to material available only in opaque plain colors; one point was added for each additional range factor. Their factors being (a) transluscency, (b) transparency, (c) availability of mottle, (d) geometric configurations.

II. **Brilliance of color:** #10 was assigned to transparent plastics having a water white base capable of accepting any color ingredient without modifying its color; one point was deducted for each of the following reasons: (a) slightly dulled, (b) dulled, (c) seriously dulled. Additional points were subtracted for transluscency and opacity because of their effect on the depth of color.

III. **Clarity and/or transparency:** Rated on a comparative basis depending upon their light transmission and haze value.

Prepared by

THE SOCIETY OF THE PLASTICS INDUSTRY, INC.

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New York 17, N. Y.

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FORM or

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Ratings in Principal Properties BASIS: **10** is best **6** is suitable

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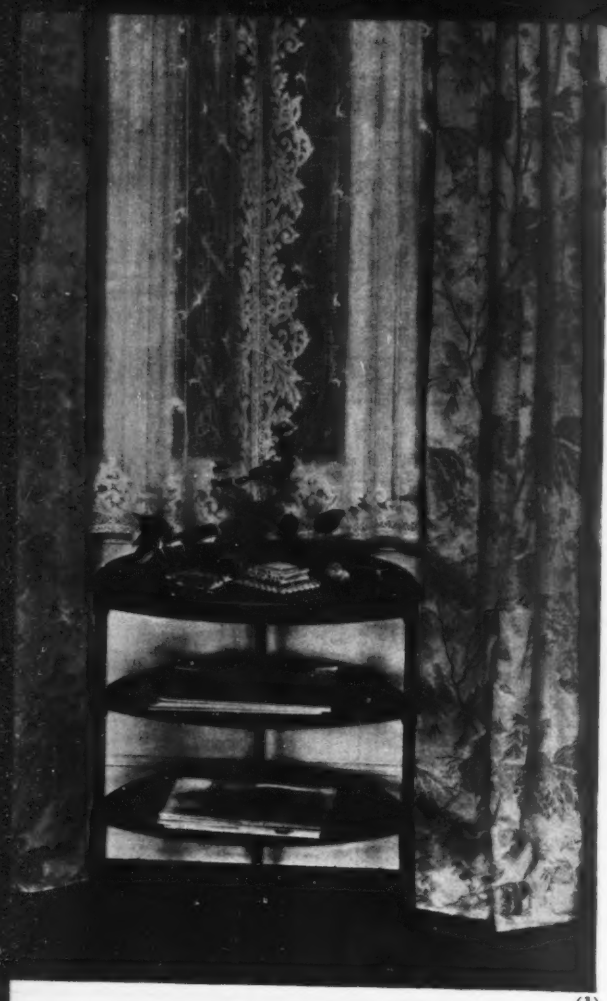
PLASTICS FOR THE CONSUMER

NON-RIGID TYPES

RM or CLASS		CELLULOSE NITRATE	ACRYLICS	POLYETHYLENE	VINYL CHLORIDE POLYMERS AND CO-POLYMERS	POLYVINYL BUTYRAL	POLYAMIDE
TRADE NAMES		FABRIKOID	(n-BUTYL METHACRYLATE POLYMER) PRIMAL RHOPLEX	POLYTHENE	GEON VINYLITE	BUTACITE BUTVAR SAFLEX VINYLITE	NYLON
	STRENGTH Tear Resistance	COATINGS ONLY	COATINGS ONLY	8	9	SAFETY GLASS INTER LAYER AND COATINGS ONLY	10
tings in ncipal perties	Resistance to Effects of WATER or Water Vapor	10	10	10	10	9	8
	Resistance to Effects of ELEVATED TEMPERATURES	6	9 170° F—200° F	9 170° F—210° F	8	9	10
	Resistance to Effects of LOW TEMPERATURES	9	9	10	9	7	9
	Resistance to Effects of Outdoor EXPOSURE	9	10	10	8	9	9
ASIS: is best suitable	Resistance to Adverse Effects of HOUSEHOLD CHEMICALS	8	10	10	10	8	10
	Resistance to SOLVENTS Found in Cleaning Fluids, Paints & Varnishes	9 AVOID STRONG ALCOHOL	8 AVOID PAINT REMOVER AND STRONG ALCOHOL	8 AVOID CLEANERS TURPENTINE AND GASOLINE	9 AVOID CARBON TETRACHLORIDE & PAINT REMOVER	7 AVOID CARBON TETRACHLORIDE AND TURPENTINE	10
	Range of COLOR	10	10	9	9	9	9
RECAUTIONS		FLAMMABLE		SENSITIVE TO CLEANING FLUIDS, GASOLINE AND TURPENTINE		SUSCEPTIBLE TO ALCOHOL	
YPICAL USES		**COATINGS ON PAPER or FABRIC** Automotive Uses Binding Trim Upholstery Winter Front Material Wiring Bookbinding Brief Cases Card Cases Card Table Covers Case Coverings Catalog Covers Comb Cases Draw Sheets Furniture Upholstery Handbags Ladies' Belts Leather (artificial) Luggage Pocketbooks Slippers Tablecloths Table Mats & Pads Toys Washable Wall Covering Window Shades	**COATINGS ON LEATHER, CLOTH & PAPER** Special Finishes	**EXTRUDED SHAPES AND FILAMENTS** Note. Not yet available to Consumers. Will share in uses now filled by vinyl chloride, vinylidene chloride and polyamids, where properties and cost are favorable. Present uses entirely in radio, radar and related applications as insulation. **MOLDED PARTS** Note. When available will compete with vinyls and cellulosics	**EXTRUDED SHAPES AND FILAMENTS** Channel Belts & Suspenders, Electric Wire Insulation, Fabrics, Tubing **COATED CLOTH & PAPER; SHEET AND FOIL** Aprons, Bowl Covers, Crib Sheets, Dress Shields, Garment Bags, Hand Bags, Lamp Shade Covers, Laundry Bags, Linen Folders, Millinery, Non-allergic Pillow Covers, Playing Cards, Packaging, Raincoats, Shower Curtains, Sports Jackets, Tobacco Pouches, Umbrellas, Window Curtains, Washable Wallpaper **SHEET, FILM AND FOIL ONLY** Household Rubber Goods, Millinery, Packaging, Refrigerator Bags, Shoe Parts, Wallets **MOLDED PARTS** Electric Connector Plugs	**SHEET & FILM** Safety-Glass Interlayer **COATINGS ON PAPER & CLOTH** Packaging Raincoats (Also other applications similar to those filled by vinyl chloride resins)	MILITARY APPLICATIONS ONLY AT PRESENT



(1)

PLASTICS MATERIALS

(*Continued from page* 36)

(2)

THERMOSPLASTIC PLASTICS

Acrylics

Methyl Methacrylate is an important resin of the acrylic type. It is a thermoplastic produced by treating an acetone derivative with methyl alcohol in the presence of sulfuric acid. Available in the form of sheets, rods, tubes, liquids and molding compounds, it is easily formed, odorless, tasteless and color fast. It has excellent transparency and optical properties. These made methacrylate especially useful to the military services and indicate many and varied peacetime applications. While relatively soft with a tendency toward scratching, it can be readily repaired by sanding and buffing. Typical uses are: lenses, reflectors, airplane windows and frames, dentures, surgical apparatus, dials, combs, costume jewelry, brush backs and powder boxes, where crystal clarity and color effects can be used to advantage.

Trade Names: Lucite, Plexiglas.

Cellulosics

The cellulose plastics are among the leading materials used in the industry. Most of them are available in a great variety of forms, including sheets, rods, tubes, molding powders, films, textile fibres, lacquer and foil. Because they have excellent colorability and their nature permits of a wide range of formulations, it is possible to emphasize certain properties for a particular end use.

Cellulose Acetate was first used about 1910 in safety photographic film, but was not available in the form of a thermoplastic molding compound until 1927. It is generally produced from a combination of cotton linters with sulphuric acid, acetic acid and acetic anhydride. Since 1934 and the development of injection molding machines, consumption of cellulose acetate plastic has increased until it now holds first place among thermoplastic molding compounds. It has fair water resistance and a limitless color range. Typical uses are: combs, novelty jewelry, tooth brushes, toys, glazing, automobile hardware and transparent containers.

Trade Names: Bakelite, Chemaco, Fibestos, Kodapak, Lumarith CA, Nixonite, Plastacele, Tenite I and Vuepak.

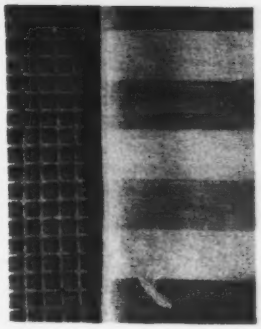
Cellulose Acetate Butyrate is similar to cellulose acetate and may be injection molded or extruded. It is produced from cotton linters treated with acetic acid,

(1) With nylon, machine-looming can produce the crinkle effect typical of French hand-looming. These draperies, experimentally woven, look like museum textiles. (DuPont) (2) Public attention has been focused on the structural use of plastics by the Plexiglas exhibit shown in department stores. This transparent-walled bedroom is part of a three-room suite. The room is small to permit low-cost air conditioning; but the curved Plexiglas (acrylic) walls give it an open, spacious effect. The four-color mural design in the background is made of four sheets of Plexiglas, each of a different color and each carrying a separate element of the design. Concealed lighting makes of it a "radiant picture", a new note in interior decoration. (Rohm & Haas)

(1)

(2)

(3)

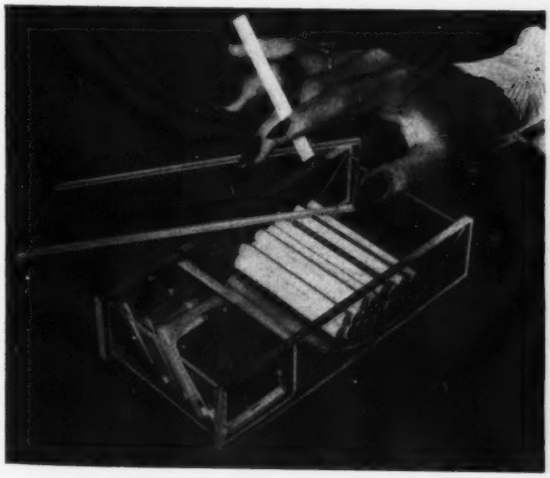


(4)

(1) Lightweight, brightly colored, resistant to hand acids and easily washed clean, Lumarith CA (cellulose acetate) is particularly suitable for objects, such as indoor game equipment, which are subject to repeated handling. (Celanese Plastics Corp.) (2) The base of this desk set, with its 50-year automatic calendar and several compartments, is made of Lucite or Plexiglas (acrylics). (M. M. Gottlieb Associates, Inc.) (3) To carry out the design of the carved wood base this Lumarith (cellulose acetate) lamp shade is decorated with a feather cut from a sheet of the same material. (Celanese Plastics Corp.; William Van Cleff) (4) Unusual textures in drapery and upholstery fabrics are shown in this picture of Velon (vinylidene chloride) materials. The fabric at the right has the feel and appearance of a sheer, rough-textured linen crash and is adaptable to colorful porch furniture and table mats. The fabric at the left shows an unusual texture for home or commercial upholstery. The material is tough, snag-resistant, fire-resistant, non-absorbent, quickly cleaned with soap and water. It will soon be available in a full range of colors—and the colors will not run or fade. (Firestone) (5) Plastics make endless contributions to beauty in the home. Transparent acrylics have the sparkle of crystal plus curving grace of design. Ureas and acetates are brilliantly colorful as well as durable—the molded acetate telephone, for example, is bright red. Woven Saran (vinylidene chloride) makes upholstery and curtains. Table tops, like the one with the colorful cowboy design, are made of laminated phenolic, melamine or urea, the color built-in, the finish permanent. (Modern Plastics) (6) Plexiglas (acrylic) makes a graceful cigarette box. The inner base is molded into a curve that makes it easy to extract the cigarettes. (Rohm & Haas; Vargish & Co.)

(5)

(6)



acetic anhydride and butyric acid. It absorbs less moisture than cellulose acetate, requires less plasticizer for the same flow and has greater affinity for the plasticizer, thus has better dimensional stability. Typical uses are: toothbrush handles, electric clock housings, portable radio housings, flashlight cases, shower nozzles, cutlery handles, combs, steering wheels.

Trade Names: Hercose, Tenite II.

CELLULOSE NITRATE, commonly called Pyroxylin, is the earliest of the important thermoplastics. It is produced from wood cellulose or cotton linters, treated with sulphuric and nitric acids and plasticized with camphor. Cellulose nitrate materials are not available in molding compound. They are sold to fabricators in the form of sheets, rods, tubes, films and emulsions. Finished products resist corrosive action of ink, are tough, water resistant, color-fast, tasteless, and flexible. Because of their high rate of combustibility, they are not suited to applications where high heat or an open flame may be encountered. They have an almost limitless color range which permits of mottled effects and geometric color designs when desired. Typical uses are: shoe heel covers, fountain pen barrels, decorative jewelry, combs, knobs, soap dishes, piano keys, spectacle frames, cutlery handles, photographic film, tooth brushes, tool handles, and ping-pong balls.

Trade Names: Amerith, Celluloid, Nitron, Nixonoid, Pyralin.

CELLULOSE PROPIONATE is one of the new materials now coming into use. It is particularly adapted to injection or extrusion molding and finished articles have high luster. It is available in all colors, is exceptionally tough, odorless and readily printed or lacquered without fear of tackiness. Uses include: radio housings, housewares, toothbrushes, tool handles, flashlight cases.

Trade Name: Forticel.

ETHYL CELLULOSE is one of the newest cellulose materials, derived by treating cotton linters with caustic soda and ethyl chloride. This product has exceptional toughness and flexibility even at extremely low temperatures, which is important with surface coatings and similar applications where this product is widely used. It is tasteless and color-fast, has good electrical properties, resistance to alkalies, weak acids and moisture. It is available in molding compounds, sheets, rods and tubes. Typical uses are: flashlights, automobile hardware, steering wheels, instrument panel assemblies, vacuum cleaner parts and electrical parts. It is also widely used in sheet form as a packaging material.

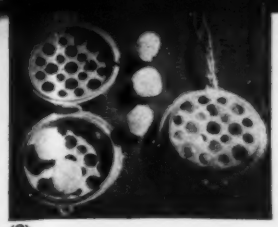
Trade Names: Chemaco, Ethocel, Ethofoil, Lumarith, Lumarith E. C. and Nixon E. C.

Polyamides

Nylon is the generic term applied to this comparatively recent group of polyamides. From a chemist's viewpoint, they simulate natural proteins. Nylon has high strength and great toughness, is odorless, tasteless, has good resistance to chemicals, is easily machined, and does not deteriorate with age. Typical uses are: molded devices needing thin cross sections, extruded tubes and filaments, brush bristles of all sorts, cordage and rope, window screens, tumblers, combs and tableware. *(Continued on page 46)*

(1)

(1) Trim for refrigerators is molded from Bakelite polystyrene, because it does not warp and has outstanding resistance to moisture. Polystyrene is one of the newest and most useful plastics. (Bakelite) (2) This container for the moth preventive, paradichlorbenzine, is molded of ethyl cellulose because that plastic is impervious to the chemical. (Hercules Powder Co.) (3) Tenite II (cellulose acetate butyrate) is used for this modern sink strainer. It will not rust, and the color, being inherent in the plastic, will not chip or peel. (Tennessee Eastman) (4) Molded hollow of Tenite (cellulosic) plastic, this sturdy mirror stand weighs only eight ounces. The double faced mirror is held by a rim that snaps permanently in place. Lugs on the under side fit tightly in hollow bosses on the frame to make an assembly that requires no cementing. Two lugs on the outside of the rim, forced into under-sized holes on the supporting arms of the base, provide a hinge for the mirror that will hold it at any desired angle. (Tennessee Eastman) (5) Plastics made it possible to produce this Klear King filter economically enough for use in the average kitchen. Styron (polystyrene) has the resistance to moisture and heat and the immunity to rust which formerly required the use of a more expensive white metal. And the bright color is permanent. (Dow) (6) The Melmac (melamine) knife, fork and spoon are used on American Airlines planes. (American Cyanamid) (7) Bowl covers and lettuce bag of Vinylite (vinyl chloride) are inexpensive, durable, highly elastic, and easily wiped clean. The lettuce bag has a little tab at the top with snap fasteners by which it can be hung from a sink faucet, and a small vent in the bottom through which water drains off. (Bakelite) (8) Inexpensive tableware of Plaskon melamine, first used by the Navy during the war, resists moisture, heat, chemical attack, discoloration. Hospitals utilize the insulating qualities of melamine in specially designed



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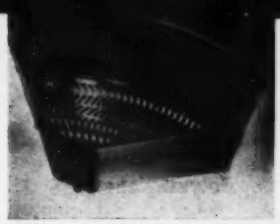

(3)

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(7)

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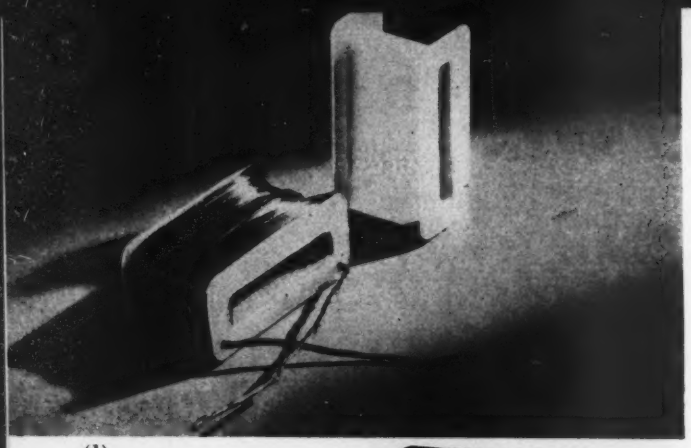
containers that keep food hot for hours. (Libbey-Owens-Ford) (9) In this assortment of kitchen equipment many plastics are represented, each selected for its exact suitability to a given purpose. The window blind is made of ethyl cellulose, the serving tray of phenolic pulp, the coffee maker of urea. Containers for dry groceries are molded of cellulose acetate, colored cutlery handles are cast phenolic. Knobs and handles for furniture and utensils are of thermosetting materials; odorless, chemically inert thermoplastics form units for refrigerators and fruit reamers. (Modern Plastics) (10) Shower curtains of Vinylite (vinyl chloride) sheeting come in a wide range of colors, will not rot, mildew or crack. The sheeting comes in high lustre or dull finish; in transparent, translucent, and opaque versions. (Bakelite)

(10)



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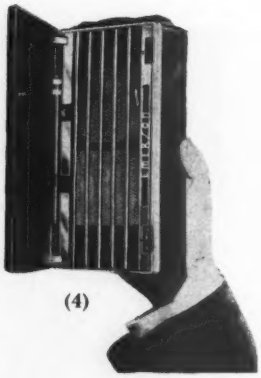


(4)

(1) Coilforms used on Army sound powered telephone set are molded from nylon molding powder. They withstand temperatures as low as minus 60° F. without cracking, and as high as 400° F. without losing shape. Note that nylon is a thermoplastic. Until quite recently no thermoplastic material was suited for any application involving temperatures above 160° F. Now there are several thermoplastic materials with high heat resistance, and the classic distinction between thermosetting and thermoplastic materials on this score may no longer be universally applied. (Du Pont) (2) Choosing the exactly right material for each purpose involved the use of three different plastics for this Emerson table radio. The housing is Catalin (cast phenolic); the compression-molded grille is Lucite (acrylic); the knobs and the molded backplate are of polystyrene. (Emerson) (3) The "Miracle Voice Grille" of the Emerson table model phonoradio is made of thin, perforated plywood bonded to a fiber core with phenolic resin. The case is also of plastic-bonded plywood; dial and knobs are polystyrene; and the pointer is made of clear cellulose acetate. (Emerson) (4) For Emerson's pocket radio a most important consideration was a very lightweight housing, with high shock resistance. So the case was molded of Tenite.

Polyethylenes

This is a relatively new, flexible and translucent material which can be processed by all the methods employed with other thermoplastics—extruded, as filaments, molded, fabricated into sheets and film, and coated on cloth. It has low specific gravity, being lighter in weight than any plastics, excellent electrical properties making it valuable in electronic uses, low moisture transmission, chemical inertness, flexibility and toughness. As manufactured, the resins are colorless but can be made into translucent articles or formulated in a wide color range with high lustre. Typical uses are: insulation for wire and cable, shower curtains, packaging. This plastic is expected to share in the uses of vinyl chloride, vinylidene chloride and the polyamides because of its properties and favorable cost factors.

Trade Name: Polythene.

Polystyrenes

Polystyrene promises to become one of the widely used thermoplastic compounds. It is related to the vinyl resin group, but is generally distinguished from the resins in that group. It is produced from benzene and ethyl chloride and is available in sheets, rods, tubes, molding compounds and laminating varnishes. Products from it are usually injection molded or extruded. It is outstanding for electrical qualities, low water absorption, permanence of dimensions, exceptional resistance to most acids and other chemicals. It is odorless, tasteless and color-fast. Uses are instrument panels, high frequency insulation, battery cases, combs, blown bottles, refrigerator parts, bottle closures, chemical and cosmetic containers, novelty jewelry, electrical and household items.

Trade Names: Bakelite, Cerex, Chemaco, Loalin, Lustron, Polyflex, Styraloy, Styramic, Styron.

Shellac

Shellac, a natural resin, was one of the first molding compositions ever used in the plastics industry. It is produced by insects which draw the materials from certain species of trees in India. This resin possesses physical properties which make it an ideal plastic binder for many applications. Modern application finds shellac being used for electrical equipment, phonograph records, as an adhesive for grinding wheels, as a finishing coat for wood work and more recently as a resinous binder for cloth, paper, silk, mica and other materials.

Vinyls

The Vinyl resins are among the more recent plastic compounds to attain widespread commercial importance, being first introduced in the United States in 1928 as rigid or semi-rigid products. They were first introduced in elastomeric, plasticized form in the early 1930's. Since this introduction numerous other compounds were developed and they have become one of our versatile plastic families. All are thermoplastics, mainly derived from acetylene which is reacted with acetic acid or hydrogen chloride to produce the acetate or chloride groups.

Polyvinyl Alcohol is a resin which has recently gained prominence as a replacement for rubbe.. It

You know it's right if it's Vinylite plastics
TRADE MARK

THE trade-mark VINYLITE on *any* product is your assurance that the manufacturer has chosen the right plastic to provide maximum durability, stain- and wear-resistance, eye appeal and *customer satisfaction.*

To gain the best results, VINYLITE Plastics are *expressly tailored* to the formulation demands of *each* particular product. Shoe sole compounds, for instance, require different ingredients from those of shower curtains, raincoats, garment bags. The properties of upholstery differ from those of men's belts and suspenders. Wire insulation is not the same as the material for handbags or shoe uppers.

Proved in the laboratories... proved in field tests... proved under severest wartime usage... products marked VINYLITE are also subject to additional inspection... additional proof... by the Better Fabrics Testing Bureau.

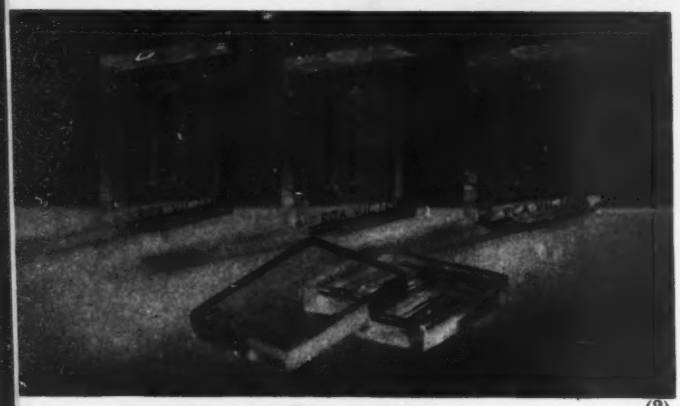
Such is the panoramic range of VINYLITE Plastics, that their applications are almost boundless. In the home, on the person, in industry, in recreation. For protection, for preservation, for safety, for esthetics. Age-defying, weather-resistant, waterproof, and chemically inert. In everybody's thoughts today... they will be in everybody's home *tomorrow.*

You know it's right if it's

Vinylite TRADE MARK PLASTICS

BAKELITE CORPORATION, *Unit of Union Carbide and Carbon Corporation* UCC 30 East 42nd Street, New York 17, N.Y.

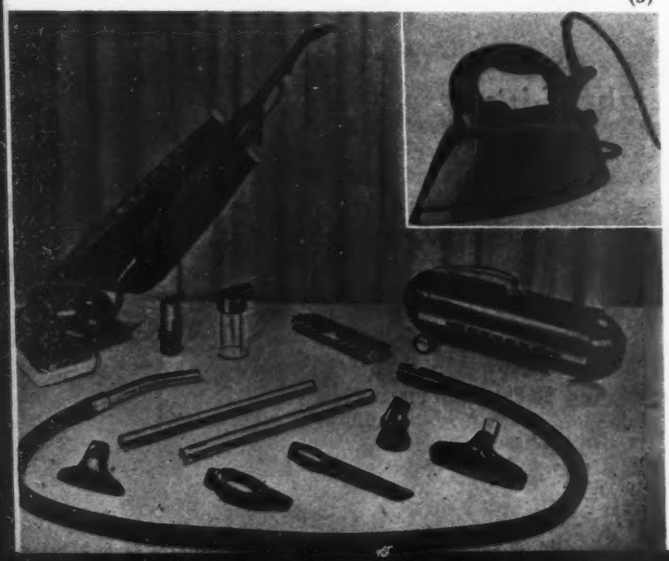
(1)



(2)

(1) Polystyrene, with its extremely low power factor and high dielectric qualities, has special uses in high frequency applications. This storage battery container is made of Styron (Dow polystyrene.) (2) A transparent package of polystyrene, molded in two tightly-fitting parts, is ideal for phonograph needles. The package has sales-winning attractiveness, and the inexpensive plastic is perfect protection against rusting. (Bakelite) (3) This is the Silex automatic electric steam iron. The strength and heat resistance of a phenolic compound were required for the iron's plastic parts, which are molded of Durez. (Durez) (4) Vacuum cleaner manufacturers, constantly redesigning their products to make them lighter in weight, find plastic materials ideal. The new Eureka "home cleaning system" adds color to the product's sales appeal by the use of Lumarith X (high acetyl cellulose acetate) and Lumarith EC (ethyl cellulose) materials for suction nozzles, hose connections, etc. Wheels and the upright cleaner and hood are Bakelite (phenolic), bumper and other parts are Vinylite.

(3)



is known for its oil and grease resistance as well as toughness. It can be molded into tough, elastic, rubber-like articles but is not recommended for use where a high degree of water resistance is required. Typical uses include aprons and gloves, grease-proofing paper, printing plates, sizing of textiles, tubing and gaskets.

Trade Name: Elvanol.

VINYL ACETATE is used as an adhesive especially for the bonding of cloth, paper, card-board, porcelain, metal, mica, stone, leather, wood and glass. It is also employed as an intermediate in the synthesis of vinyl butyral and polyvinyl alcohol which are described below.

Trade Names: Gelva, Vinylite.

VINYL BUTYRAL is one of the polyvinyl acetals made by reacting aldehydes with polyvinyl alcohol. By varying the degree of plasticization and the types of fillers or other ingredients, it can be compounded into plastics ranging from hard, stiff molding materials to extremely soft and extensible products. It can also be made in a wide range of colors, including clear transparent. Its uses include: an elastomer for fabric coatings, safety glass, for molding and extruding.

Trade Names: Butacite, Butvar, Saflex, Vinylite X.

VINYL CHLORIDE is the basic resin of high molecular weight produced from acetylene and hydrogen chloride. By plasticization its hardness and flexibility may be varied from soft gels to bone hard products. Its inherent stability makes it chemically resistant to most destructive factors. Because of its inertness however, it is difficult to dissolve in even the best solvents. Its uses include wire insulation, shoe soles and parts, extruded belts, straps and moldings, coated fabrics, unsupported sheetings, films, rainwear, molded articles, toys and novelties. It may be colored and compounded to obtain a range of physical and chemical characteristics.

Trade Names: Chemaco, Geon, Vinylite.

VINYL CHLORIDE-ACETATE is a combination of vinyl chloride and vinyl acetate in which the best properties of each are retained. Well-known products made from it include suspenders, shower curtains, wire insulation, shoe soles and tipping, cosmetic containers, waterproofed fabrics, rainwear, tobacco pouches, and recordings for broadcasts. It is available in a wide range of colors and many properties.

Trade Name: Vinylite.

VINYLIDINE CHLORIDE is another recent development combining many of the best properties of each of the base materials but also obtaining certain unexpected results. Whereas its chemical and physical properties are closely allied with those of polyvinyl chloride its solubility is greater in the better solvents and its processing temperatures are lower. Its primary applications are for coated fabrics, unsupported sheetings, film, extruded and molded articles. It may be plasticized and colored in much the same way as polyvinyl chloride. When injection molding is employed, typical products are valve seats, acid dippers, filter parts and nozzle tips.

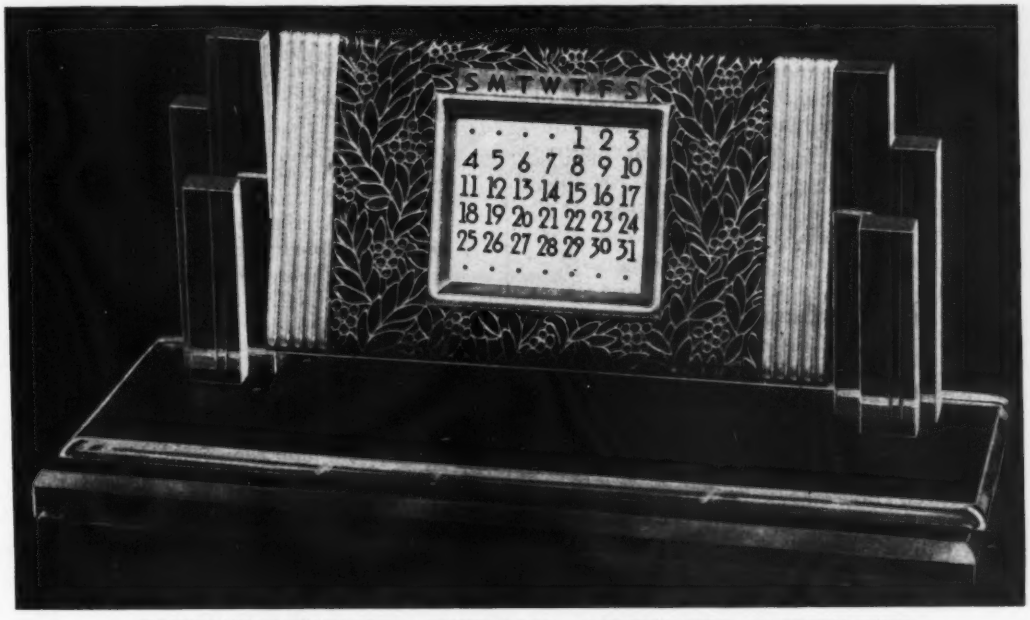
Trade Names: Geon, Saran.

(*Continued on page* 52)

IT'S A DATE IT'S NEW

YESTERDAY! TODAY! TOMORROW!

FOR FIFTY YEARS
. . from . .
1940 to 1990



(ILLUSTRATION EXACT SIZE—6 INCHES LONG—2¾ INCHES WIDE—2¾ INCHES HIGH)

REFER BACK . . . PLAN AHEAD

no matter how you look at it

IT'S A DATE

A date with this beautiful 50 YEAR AUTOMATIC CALENDAR—a thing of beauty and utility.

The calendar is made of solid brass with exquisitely etched design in silver or gold-like finish—fine enamel background.

The base is made of crystal clear Plexiglas-Lucite with highly polished finish even to the beveled edge and has handy pen or pencil groove.

AN EXCLUSIVE PATENTED CREATION BY

M. M. GOTTLIEB ASSOCIATES, INC.

CREATORS AND PRODUCERS OF OUTSTANDING PLASTIC & METAL SPECIALTIES

ALLENTOWN, PENNA.

IMMEDIATE DELIVERY PLACE YOUR ORDER NOW

Informative Labeling Guide: Basic Suggested

THIS is a guide for the preparation of informative labels to be used by manufacturers of consumer goods made entirely or substantially of plastics materials. It has been prepared in response to the demand that products of the plastics industry carry instructions for proper use and care.

That such a demand exists has been demonstrated in many ways: by statements made in contacts with store buyers, by surveys among retail people and merchandisers, and by contact with consumers. We, as an industry, have been told repeatedly that our products should be so labeled when they reach the retail counter that the consumer will know how to use them properly and avoid the mishandling that causes dissatisfaction and gives rise to prejudice against plastics in general.

After discussion of the problem over an extended period of time, a committee of the SPI was appointed in March, 1945. This Committee has held a number of meetings and has thoroughly discussed the whole situation. Here are the premises on which the committee has operated:

> The great number of different plastic materials presents a confusing picture to the general buying public.
>
> The consumer, in the person of the housewife (who buys the great bulk of consumer goods), is not interested in becoming a plastics expert. She wants to know how to use and care for the products which she buys.
>
> The chemical names applied to plastics are, with few exceptions, neither noted nor remembered by her. She is inclined to remember publicized trade names.
>
> She is critical and may have been disappointed in some of the products she has bought, an important reason being that she did not know how to use what she bought and could not find out from the retail salesperson when she bought them.

With these premises in mind, the SPI Informative Labeling Committee has set up the series of basic descriptions of the various plastics used in consumer goods which appears on the opposite page. It has made these as brief, simple and accurate as possible. As new and improved materials appear this guide will have to be revised.

These basic descriptions are suggested to the industry for use in preparing informative labels. THEY ARE NOT LABELS THEMSELVES BUT MERELY THE STARTING POINT FOR DIFFERENT LABELS TO MEET PARTICULAR NEEDS.

A good informative label is prepared specifically for the product on which it is used, whether that be a tumbler, a pair of sunglasses, a kitchen measuring spoon or a screw driver. Suppose, for instance, an SPI member is manufacturing tumblers of urea formaldehyde molding material which he sells to chain stores. The chain stores have asked him to supply an informative label with each tumbler. He will turn to this report and start to write his label using the urea description as a guide. He knows that his tumbler might be used with foods so he adds a line saying,

"Does Not Contaminate Food."

He may feel that some people buy a urea tumbler under the impression that they are unbreakable, so he may add a line,

"Strong and Durable, Not Unbreakable, But Will Not Shatter."

His particular tumbler may also have certain design advantages and he may wish his label to help do a selling job. He, therefore, may add a line,

"X-Brand tumblers available in colors to match every bathroom and kitchen color scheme. Molded-in measuring marks make use for administration of medicine doses easy."

His completed label would then read something as follows:

> ***This is a plastic (add Trade Name). Sunfast, alcohol resistant, light in weight, warm to touch, non-rusting, non-corrosive, color solid throughout, odorless, tasteless. Wash only in warm, NOT BOILING, water, with mild soap. Use no abrasives. AVOID FLAME or HIGH HEAT — Does not contaminate food — Strong and durable, not unbreakable, but will not shatter.***
>
> ***X-Brand tumblers available in colors to match every bathroom and kitchen color scheme. Molded-in measuring marks make use for administration of medicine easy.***

Note that the molder in this case uses his own trade name on which he has built his reputation. Obviously there is a responsibility on the part of the molder, or fabricator, to correctly design and manufacture in the best material for the specific application involved. He may, on the other hand, wish to use the trade name of the material supplier, which might be better known. If so, he would include the trade name in his descriptive label.

It would be impossible to write a descriptive label that would cover all such products without including statements which would be superfluous and useless in some cases. The information presented in this typical label is complete, brief and highly useful to the consumer. If she follows the directions given, she is assured a long and satisfactory life for the tumbler.

The labels prepared from this guide may take many forms: stick-ons, decals, seals, tags, inserted slips, printed box covers, molded-in lettering or any other suitable form. It is suggested that regular commercial sources be sought for ultilizing these.

The program also represents an opportunity for the industry, each unit working separately, to perform a public service and to improve the public relations of the industry as a whole.

Descriptions For Labeling Plastics Products

THERMOSETTING

Casein—Trade Name: Ameroid

This is a plastic—(Trade Name). Color-fast to laundering, non-shatterable, light in weight, warm to touch, non-corrodible, color solid throughout, non-rusting, odorless, tasteless. Wash only in warm, *not boiling*, water with mild soap. Use no abrasives. *Avoid flame* or *high heat*. Can be dry-cleaned. Withstands ironing. Use moderate heat.

Melamine—Trade Names: Melmac, Plaskon, Resimene.

This is a plastic—(Trade Name). Light-fast, resistant to alcohol, color-fast to laundering, withstands boiling water and ironing, non-shatterable, light in weight, warm to touch, non-rusting, non-corrodible, color solid throughout, odorless, tasteless. Wash in warm water with mild soap. Can be dry-cleaned. Use no abrasives. *Avoid flame* or *high heat*.

Phenolic (Molded)—Trade Names: Bakelite, Durez, Durite, Heresite, Indur, Makalot, Resinox

This is a plastic—(Trade Name). Strong, non-shatterable, light in weight, warm to touch, non-rusting, non-corrodible, color solid throughout. Colorfast to laundering. Can be dry-cleaned. Withstands ironing. Withstands boiling water, resistant to alcohol. Wash in warm water with mild soap. Use no abrasives. *Avoid flame* or *high heat*.

Phenolic (Cast)—Trade Names: Bakelite, Catalin, Gemstone, Marblette, Prystal

This is a plastic—(Trade Name). Strong, non-shatterable, light in weight, warm to touch, non-rusting, non-corrodible, color solid throughout. Withstands boiling water, resistant to alcohol. Wash in warm water, *not boiling*, with mild soap. Use no abrasives. Can be dry-cleaned. Withstands ironing. *Avoid flame* or *high heat*.

Urea—Trade Names: Beetle, Plaskon, Sylplast

This is a plastic—(Trade Name). Light-fast, resistant to alcohol, non-shatterable, color-fast to laundering, light in weight, warm to touch, non-rusting, non-corrodible, color solid throughout, odorless and tasteless. Wash only in warm, *not boiling*, water, with mild soap. Use no abrasives. Can be dry-cleaned. Withstands ironing. Use moderate heat. *Avoid flame* or *high heat*.

THERMOPLASTICS

Cellulose Acetate—Trade Names: Chemaco, Fibestos, Kodapak, Lumarith C.A., Nixonite, Plastacele, Tenite I, Vuepak

Cellulose Acetate-Butyrate—Trade Name: Tenite II.

Ethyl Cellulose—Trade Names: Chemaco, Ethocel, Ethofoil, Lumarith, Lumarith E. C., Nixon E. C.

[*This description will apply to any of the three foregoing materials.*]

This is a plastic—(Trade Name). Tough, non-shatterable, light in weight, warm to touch, non-rusting, non-corrodible, color solid throughout, tasteless, and color-fast. Wash only in warm, *not boiling*, water, with mild soap. Use no abrasives. *Avoid flame* or *high heat*.

Acrylic—Trade Names: Lucite, Plexiglas.

This is a plastic—(Trade Name). Light-fast, tough, non-shatterable, light in weight, warm to touch, non-rusting, non-corrodible, color solid throughout, odorless, tasteless and color-fast. Wash only in warm, *not boiling*, water with mild soap. Use no abrasives. *Avoid flame* or *high heat*.

Cellulose Nitrate—Trade Names: Amerith, Celluloid, Nitron, Nixonoid, Pyralin

This is a plastic—(Trade Name). Tough, non-shatterable, light in weight, warm to touch, non-rusting, non-corrodible, color solid throughout, tasteless and color-fast. Wash only in warm, *not boiling*, water with mild soap. Use no abrasives. *Avoid flame* or *high heat. Burns vigorously when ignited.*

Polyamide—Trade Name: Nylon

This is a plastic—(Trade Name). Strong, non-shatterable, tough, light in weight, warm to touch, non-rusting, non-corrodible, color solid throughout. Odorless, tasteless. *Avoid flame* or *high heat*. Withstands boiling water, resistant to alcohol. Wash in warm water with mild soap. Use no abrasives.

Styrene—Trade Names: Bakelite, Cerex, Chemaco, Loalin, Lustron, Polyflex, Styraloy, Styramic, Styron

This is a plastic—(Trade Name). Light in weight, warm to touch, non-rusting, non-corrodible, color solid throughout, odorless, tasteless and color-fast. Resistant to alcohol. Wash only in warm, *not boiling*, water with mild soap. Use no abrasives. *Avoid flame* or *high heat*.

Vinyl—Trade Names: Chemaco, Geon, Saran, Vinylite

This is a plastic—(Trade Name). Tough, non-shatterable, light in weight, warm to touch, non-rusting, non-corrodible, color solid throughout, tasteless and color-fast. Wash only in warm, *not boiling*, water with mild soap. Use no abrasives. *Avoid flame* or *high heat*.

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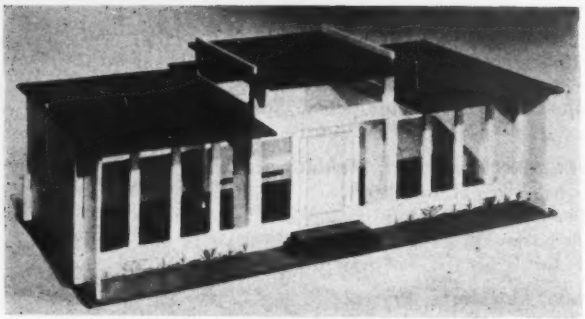
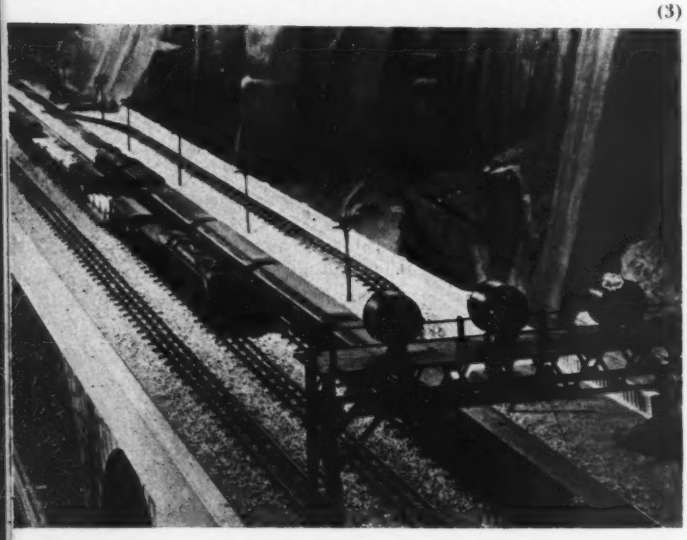


(2)

(1) Baby pants of Vinylite (vinyl chloride) are waterproof, easily cleaned, durable and highly resistant to tearing. (Bakelite) (2) Very up-to-date, this "solar" doll house has shatterproof windows of transparent Lumarith CA (cellulose acetate) sheets. (Celanese Plastics Corp.; Wood Products Manufacturers) (3) Famous for their miniature realism, Lionel trains and accessories use several different plastics, exactingly specified for different purposes. Switch and track bases, station platforms, Pullman cars and other parts employ general purpose Bakelite phenolics because of their impact strength, dimensional stability and insulating qualities. Gondola cars are injection molded from transparent Bakelite polystyrene, then painted black. Headlights, running lights, and caps are molded of transparent red and green Bakelite polystyrene. A new station house will have a molded phenolic roof, polystyrene window and door frames, and windows of translucent Vinylite. (Bakelite; Lionel Corp.; Modern Plastics.) (4) A folding toilet seat for babies, molded of Lustron (polystyrene), and fitted with metal hinges and supports. Polystyrene is acid-resistant and non-aborbent, easily cleaned and, like all plastics, comfortably warm to the touch. (Monsanto; Kiddie Seat Corp.)

(3)



RUBBER-LIKE PLASTICS

In addition to the materials commonly used for molding, fabricating and laminating, as well as treating or making textiles, there are rubber-like products. These synthetic rubbers are: Buna N type or GR-A rubbers, Buna S or GR-S rubbers, Neoprene or GR-M, Butyl or GR-I, and Thiokol.

Buna *N* is similar to natural rubber in mechanical properties and is almost unaffected by oils. It has the property of remaining flexible at extremely low temperatures and of resisting aging at high service temperatures. It can be vulcanized with less sulfur than natural rubber. When fillers are used, it acquires added properties which make it resistant to vegetable fats and oils, inks, paints, dyes. Common uses include: carburetor diaphragms, self-sealing fuel tanks, aircraft and gasoline hose, gaskets and seals, machinery mountings, abrasive wheels, printing rolls and truck tires.

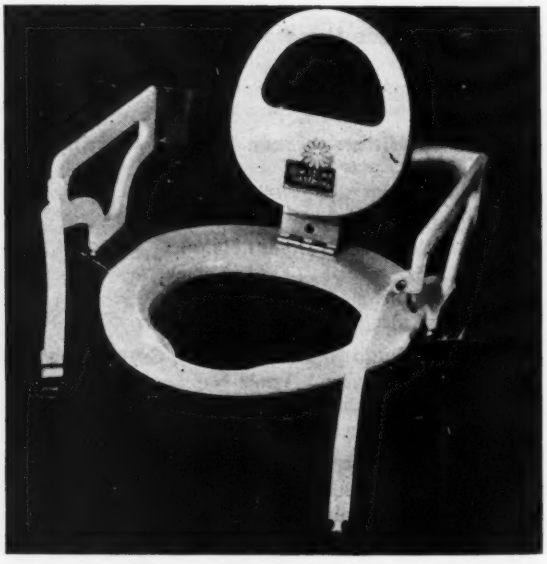
Buna S has comparable resistance to aging and abrasion of natural rubber but lacks the flexing qualities. It can be readily molded or used to insulate wires and cables which must withstand high temperatures and rough handling.

Neoprene has high tensile strength, resilience, elasticity and abrasion resistance. It performs the functions of rubber under conditions where the latter would not last. Typical uses are: transmission belts, printing rolls, insulation, aprons, shoe soles.

Butyl is extremely resistant to deterioration by ozone and chemicals. It is more difficult to vulcanize than the buna rubbers and cannot be converted to hard rubber. It has excellent electrical properties, resistance to flexing, and good tensile strength. Common uses are: life-rafts, pontoons and inner tubes.

Thiokol, which is produced in four types, is chemically unlike and considerably inferior to rubber. It cannot be vulcanized with sulfur, but it is resistant to oils and solvents of the group of synthetic rubbers now available.

(4)



Stores Report Current Experience with Airfreight Shipments

By Leonard Mongeon

Traffic Group Board meeting also discusses damage claims with Railway Express manager.

AT the recent January convention of the NRDGA, the Traffic Group held a joint meeting of its Board of Directors and Transportation Committee, and we propose to summarize the more important discussions that took place.

Tremendous interest was displayed in the possibilities of transporting department store freight by air cargo companies.

It developed that a few stores were already using air cargo companies, not for the transportation of occasional emergency shipments, but for the daily transportation of fashion merchandise. Outstanding in this connection were several Los Angeles members of the NRDGA. These Los Angeles members, working cooperatively, are having their air shipments consolidated—or aggregated, if you please—by a New York packing and shipping company, and, from latest reports, three times a week they fill a small air plane with about 6,000 pounds of fashion merchandise which reaches Los Angeles the next morning.

Two of the stores engaged in this Los Angeles cooperative effort had representatives present: Fred Simpson, Broadway Department Store, Inc., and Everett C. Valdes, Desmond's. These men reported that they have a very low freight rate, relatively speaking, on planeloads. This low planeload rate permits them to make substantial use of air service. In fact, their planeload rate is not much higher than the Railway Express Agency rate.

With respect to insurance, Mr. Simpson said that their insurance company gave them the same low rate on air freight as it does on ground freight. Because of the limited liability of the airlines—which is about the same as the limited liability of the Railway Express Agency, that is to say, 50 cents per pound, with a minimum of $50—it is desirable for the store to protect itself on the additional valuations involved.

Arthur Bibbs of Halle Bros., Cleveland, brought up the question of the movement of sportswear from the Los Angeles market to stores in the midwest and along the eastern seaboard. California has become a very important source of sportswear, and if there is any type of merchandise that is going to move from the west coast to the east, it will be that particular merchandise.

Rate Reduction Essential

It was the feeling of the stores present that the airlines would not capture any appreciable amount of this tonnage until they reduce their rates. This west-to-east movement is not on a planeload basis (as is the east-to-west movement to Los Angeles) and the less-than-planeload basis is naturally much higher than the rates applying on planeloads. The idea was advanced that possibly stores in the midwest and east could work cooperatively and move their Los Angeles merchandise on a planeload basis, with the plane making stop-offs in St. Louis, Chicago, Detroit, Cleveland, etc.

J. D. Boylan, General Airfreight Agent of American Airlines, who was sitting with the Committee, said their goal was 50 million pounds of air freight for 1946, and that the great bulk of that would be dry goods in one form or another.

Mr. Boylan also disclosed that the American Airlines in the very near future would reduce their rates on less-than-planeload lots as much as 50 per cent. In other words, these reductions would apply on small individual shipments.

Mr. Bibbs expressed the view that the increased turnover angle, which has been emphasized by all airlines, is considerably overrated *under present day conditions,* because no matter when the merchandise arrives it can be sold. It was his view that the all-powerful reason for using air transportation is so that you will have the new styles first.

It was the consensus of opinion that department stores would use the common carrier type of operation, wherein small individual shipments could go forward directly to the store each day, without any cooperative effort among the stores in that city. It was felt that the planeload type of operation would not be popular among department stores because the merchandise would not go forward to destination, in many cases, the same day as it was delivered to the air carrier; in other words, it would take time to accumulate a planeload, so that daily service would not be possible now nor in the foreseeable future.

A poll of the stores present indicated that, with the exception of Los Angeles, air service was being used primarily for samples and for occasional emergency shipments, and the reason for the relatively little use which was being made of air cargo service was due to the high rates in effect. The thought was also expressed that the Railway Express Agency would unquestionably do something to meet this new and growing competition to their service.

Some dissatisfaction was expressed with the airlines for limiting their liability in the same manner as the Railway Express Agency. The question was posed: "Why shouldn't the air cargo companies assume full responsibility, the same as the railroads and freight forwarders do?" The members were not in unanimous agreement on this point, however, with some members expressing dissenting views.

The discussion of air transportation was ended and the members then discussed several problems with C. B. Williams of the Railway Express Agency. (*Cont'd on pg.* 56)

The first problem to be discussed was that pertaining to merchandise frozen in transit.

The Railway Express Agency claims it is not liable for merchandise which freezes in transit, such as toilet preparations, *unless they are negligent in handling the shipment.* If they were negligent, they will pay the entire claim.

Members have taken the view that they use Railway Express Agency at high rates, instead of using freight carriers, in order to avoid merchandise freezing in transit; therefore, when merchandise does freeze in transit the Agency should pay the claim.

Mr. Williams explained that during the war period they were forced to use all kinds of equipment, including box cars, and that much of this equipment was not susceptible to heating. Because of those conditions, toilet preparations and other kinds of perishable goods were damaged by the cold.

He further stated that (1) a substantial number of these freezing claims of retailers were declined by their claim agents, of which there are eleven distributed throughout the United States; (2) these claim agents had not been following a uniform policy which had led to confusion and dissatisfaction; and (3) now they have undertaken to provide a definite policy for uniform application, which should lead to more satisfactory adjustment for claimants. He said that some claims might have been turned down that should have been paid, and he offered to review any such claim, and if the claim agent was wrong they would overrule him and make payment. He suggested that the members contact him directly by letter, and give him all of the details. He further stated that they wanted to be as liberal as possible in their adjustment of such claims.

The next problem discussed with Mr. Williams had to do with damage claims on spun or blown glassware.

Some of the claim agents of the Railway Express Agency had taken the attitude that the merchandise was so fragile that it could not be transported without damage and they refused to admit liability, on the ground that the inherent nature of the goods prevented safe transportation.

Mr. Williams made the statement that, after studying this subject, they have adopted this policy: First, if the shipment shows signs of damage or rough handling and there is breakage, regardless of the method of packing, the Express Agency will pay the full amount of the claim without question. Second, where the shipment is handled without any outside evidence of damage—in other words, concealed damage—and the inspection at destination indicates the goods were not sufficiently or properly packed, the Agency will decline to admit any liability. Third, on a claim for concealed damage on shipments that are properly packed, the claim will be settled on a 50 per cent basis.

It was the consensus of opinion that the Transportation Committee give further consideration to this policy of the Railway Express Agency on spun and blown glassware, and advise the Railway Express Agency whether it will be satisfactory to the NRDGA.

The third subject discussed with Mr. Williams was the question of salvage in connection with Railway Express Agency shipments where the shipment has traveled under a released valuation of a minimum of $50.00 or 50 cents per lb.

Mr. Williams said that the Agency prefers to have the consignee dispose of the salvage because, usually, they can get more for it than the Agency can. They have better methods of disposing of it. He then gave this example: A shipment is worth $75, and it is released at a valuation of $50. Assume also that the consignee sells the damaged goods for $40. The Railway Express Agency would pay the consignees $50, and would claim $15 of the $40, because they would be entitled to the *overage* above the invoice value of the shipment. In other words, the invoice value of the shipment was $75, and if the consignee gets $50 from the Express Agency and $40 from salvage, then they are realizing $90 on their claim, when the invoice value of the shipment is only $75. The Agency, therefore, would be entitled to $15, which would be used to reduce their loss.

Some of the members did not agree with that view and contended that the Railway Express Agency was not entitled to any of the salvage.

Edward Reynolds of Carson Pirie Scott, Chairman of the Traffic Group, presided at the meeting.

● Other subjects discussed at the Traffic meeting will be covered in the next issue of Traffic Topics.

ANNOUNCING

25th Annual Convention

TRAFFIC GROUP
NRDGA

The Brown Hotel,
Louisville, Ky.

JUNE 4-5-6

A Clinic on Transportation, Receiving, Price Marking and Warehousing Problems

Retailing-to-Come: The Planned Shopping Center

Model of the Ridgeway Shopping Center, Stamford, Conn., scheduled for completion in 1947. The only enterprise of its kind in the East, it accommodates department store branches, specialty stores and a restaurant under one roof.

By Alfons Bach

THE latest thoughts in 20th Century merchandising have been incorporated in a new project, Ridgeway Shopping Center, now under construction in Stamford, Connecticut.

Ridgeway was designed to accommodate both the branch of a major department store and a number of smaller merchants, in a community of stores housed under the same roof. Ridgeway is equipped to accommodate approximately 36 different stores in all. It occupies an area of more than 10 acres and extends over three city blocks in length. The only enterprise of its kind on the Eastern seaboard, Ridgeway is scheduled for completion in 1947.

A large parking space has been incorporated into the plans. It accommodates 150 cars in front and 850 in the rear of the stores. A large overhang protects the shopper from the rain or sun, leading her along a series of store fronts to her ultimate destination. It also permits her to shop in comfort in one location, with perhaps a pause for luncheon in the center's restaurant.

Ridgeway being a new enterprise, we have concentrated primarily on designing the stores, as well as the overall project, to allow for utmost efficiency for each occupant. While the entire scheme is planned along modern lines, each individual store interior is tailored specifically for the type of merchandise it will house. Special consideration was given to design and settings. Indirect lighting was employed to create a dramatic background for displays. The principle of open front stores was used to increase "eye-appeal" and to do a self-selling job for each tenants' merchandise. Since it is almost impossible to fit new merchandise efficiently into old or inappropriate settings, we have not proceeded with interior layouts until such time as we know who is going to occupy the store.

It is my firm belief that suburban shopping centers will be one of the important methods of future retail distribution. Decentralization is now in full swing. In an alternative choice between a shopping center and roadside selling, I hardly believe there is any need for comparisons. Roadside selling is an uncertain proposition at best, too much dependent on such factors as weather and traffic. A shopping center, on the other hand, moved back along the traffic lanes of the community, offers fair certainty of a continuous flow of potential consumers. There are also such factors to consider as presumably lower rent than a Main Street location, mutual support of non-competitive enterprises in the same block of stores, possible cooperative advertising of the center as a total unit.

I believe Ridgeway Shopping Center is the first step toward organized retail distribution-to-come. Shopping centers today are a necessity, not an experiment. The development of such centers on a broader scale would substantially alter city planning of the future. It will no longer be possible to build indiscriminately on any available piece of ground without due thought to the final overall scheme. The planning of suburban communities of tomorrow would mean thoughtful consideration of the traffic problems, resulting in a controlled flow of traffic from the nearby residential section through the focal point—the shopping center—out to the main highway.

If we are to escape the hopeless confusion of today's traffic tie-ups and the resultant slow motion, we have to start now, making provisions for the future. And shopping centers for suburban communities offer a pretty simple, and advantageous, solution.

WHAT'S GOING ON

By John Hahn

IF seeing is still believing, and we have no reason to doubt it, then the members of the House Banking and Currency Committee which is deliberating continuance of price control legislation when the present Act expires in June, will understand from exhibits and testimony what the NRDGA has been contending for months, viz: that the present regulations are hampering production and should be amended at spots in order to encourage manufacturers to produce much needed articles.

As we go to press, the NRDGA is getting together its convincing merchandise exhibit which told such an impressive story to the Senate Smith Committee some months ago. It again will be set up in official Washington for the benefit of the House committee in order to help them understand just what is occurring in the markets to which America's stores look for items to meet consumer needs. To the original exhibit, which was made up of some 200 items will be added articles in other lines, including furniture, lawn mowers, etc.

All parties to the discussion seem to be unanimous now in the one objective, it appears from utterances made from time to time on the general subject. As a goal they seem to believe that increased production is necessary to safeguard against inflation. Gordon Creighton, Assistant General Manager of the NRDGA, points this out in a bulletin to members which includes quotes from statements made by President Truman, Lew Hahn, President Major Namm and Chester Bowles. The dominant note in each quote is the imperative need for increased production.

As Congress deliberates, Chester Bowles hammers away at his pet theme that those who utter one word against his regulations are foes of price control. In reply to his latest blast made before the Farmers Union at Topeka unwarrantedly accusing NRDGA among others as being out to wreck controls, etc., etc., Major Namm wired him that "our answer to your accusations will be a presentation of facts." He was referring to the exhibit the association is opening in the Old House Office building, Washington, which he points out will be open to the members of the OPA staff among others. As well as the testimony that retail witnesses will offer.

The Major again emphasizes that the NRDGA does not seek the end of price control at this time. "We merely wish to amend it."

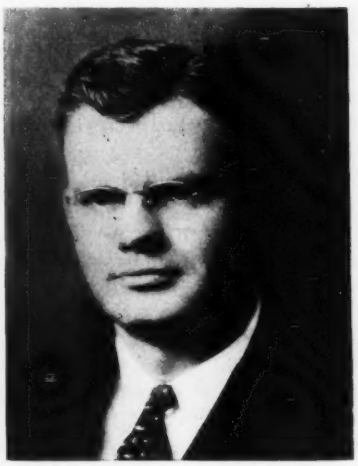
That OPA has come around to the idea that increased production is essential in the battle against inflation is also evident from the statement made by Zenas L. Potter, special assistant to the administrator of OPA, in a recent speech in New York. He said there is "no production failure." Why not tell us where are the white shirts, the suits, shorts, pajamas and other needed things of yesteryear?

There have been some very hard-to-believe-cases cited to show how hard to understand some of the OPA regulations and decisions really are. But none in our judgment, equals the one told by Bob Seidel in a speech made before the New Haven, Conn., Chamber of Commerce last month. As Mr. Seidel told it:

"A wounded ex-prisoner of war.

Arthur A. Brin, newly appointed sales promotion manager of Simplicity Pattern Co., will have charge of promotions in store fabric departments.

Edward Marcus, vice-president and secretary of Neiman-Marcus, Dallas, has been appointed to the additional post of director of the New York offices.



Richard D. Gleason has been appointed advertising and promotion manager of Robert Reis & Co., men's wear producers and distributors.

...How MOHAWK helps you build a Big Time Carpet Department

...IN TEN EASY LESSONS

PICK OUT your nearest *Mohawk Distributor* from the list below.

GET THE STRAIGHT story from him on *Mohawk's* streamlined Stock Control Plan that reduces ordering, inventories and carpet stocks to their simplest forms—and gives new speed to carpet turnover.

FIND OUT about *Mohawk's* comprehensive spread of carpet grades, patterns and colors that assures quick carpet sales—and virtually no returns.

TIE-IN with *Mohawk's* sales-producing advertising program for 1946.

TAKE ADVANTAGE of the modern merchandising assistance and sales education material developed for you by the "Mill with the Retail Viewpoint."

CAPITALIZE on the consumer prestige enjoyed by *Mohawk* carpets.

PROFIT from the quick customer acceptance of *Mohawk's* pretested Foundation Colors.

TIE-UP with the huge production volume that will be possible in one of the world's largest carpet mills.

LEARN about *Mohawk's* continuing program of style research to make the *Mohawk* Line even better—and keep you supplied constantly with *Mohawk Best Sellers!*

ENJOY the advantages of *Mohawk's* facilities for supplying *all* grades in *all* weaves.

MERCHANDISE THE FIVE POINT STAR WAY —THE MOHAWK WAY!

MOHAWK

The Mill with the Retail Viewpoint

MOHAWK *Products and Services are brought to you by the greatest Distributing Organization ever assembled in the Carpet Industry*

ARIZONA
Phoenix—Momsen-Dunegan-Ryan Company

CALIFORNIA
Los Angeles 14—Butler Brothers
Los Angeles—Murray B. Marsh Company
San Francisco 19—Butler Brothers
San Francisco—Murray B. Marsh Company

COLORADO
Denver—Orchard & Wilhelm Company

FLORIDA
Jacksonville 6—Peaslee-Gaulbert Corp. Inc.
Miami 36—Irving Distributors, Inc.
Miami 27—Peaslee-Gaulbert Corp. Inc.
Tampa 1—Peaslee-Gaulbert Corp. Inc.

GEORGIA
Atlanta 3—Peaslee-Gaulbert Corp. Inc.
Atlanta—J. J. Haines & Company

ILLINOIS
Chicago 8—Glabman Brothers, Inc.
Chicago 54—Neidhoefer & Company
Chicago—Butler Brothers

INDIANA
Evansville 10—Small & Schelosky Company
Indianapolis—Small & Schelosky Company

IOWA
Des Moines 8—Schmitt & Henry Mfg. Co.

KENTUCKY
Louisville 1—Peaslee-Gaulbert Corp. Inc.

LOUISIANA
New Orleans—Peaslee-Gaulbert Corp. Inc.

MARYLAND
Baltimore 1—J. J. Haines & Company
Baltimore 3—Butler Brothers

MASSACHUSETTS
Boston 10—Prescott & Company

MICHIGAN
Detroit—Buhl Sons Company
Detroit 26—Lott & Geckler
Grand Rapids—Buhl Sons Company

MINNESOTA
Minneapolis 3—Butler Brothers

MISSOURI
Kansas City—Orchard & Wilhelm
St. Louis—Butler Brothers

NEBRASKA
Omaha 1—Orchard & Wilhelm

NEW YORK
Albany—Columbia Distributors, Inc.
Binghamton—Columbia Jobbing Company
Buffalo 3—Lott & Geckler
New York 16—Crockett & Buss, Inc.
New York City 16—Lack Carpet Company, Inc.
Rochester 4—Columbia Distributors, Inc.
Syracuse 16—Columbia Distributors, Inc.
Utica 4—Columbia Distributors, Inc.

NORTH CAROLINA
Charlotte 1—Allison-Erwin Company
Goldsboro—Allison-Erwin Company
High Point—Allison-Erwin Company

OHIO
Cincinnati—Lott & Geckler
Cleveland 15—Lott & Geckler
Columbus—Lott & Geckler
Toledo—Buhl Sons Company

OKLAHOMA
Oklahoma City 1—Peaslee-Gaulbert Corp.

OREGON
Portland 9—Murray B. Marsh Co.
Portland 8—Marshall-Wells Co.

PENNSYLVANIA
Allentown—Columbia Jobbing Co.
Erie—Lott & Geckler
Harrisburg—Columbia Jobbing Company
Philadelphia 6—Butler Brothers
Philadelphia 7—S. Wolf & Sons
Pittsburgh 22—George Wehn & Company
Reading—Columbia Jobbing Company
Scranton—Columbia Jobbing Company

SOUTH CAROLINA
Greenville—Allison-Erwin Company

TENNESSEE
Chattanooga 8—J. J. Haines & Company
Knoxville 8—J. J. Haines & Company
Memphis—Peaslee-Gaulbert Corp. Inc.
Nashville—Peaslee-Gaulbert Corp. Inc.

TEXAS
Dallas 1—Peaslee-Gaulbert Corp. Inc.
Houston 1—Peaslee-Gaulbert Corp. Inc.
San Antonio 6—Peaslee-Gaulbert Corp. Inc.
El Paso—Momsen-Dunegan-Ryan Company

UTAH
Salt Lake City—Murray B. Marsh Company

VIRGINIA
Norfolk—J. J. Haines & Company
Richmond—J. J. Haines & Company

WASHINGTON
Seattle 14—Marshall-Wells Company
Seattle 1—Murray B. Marsh Company
Spokane 8—Murray B. Marsh Company

WEST VIRGINIA
Charleston 21—Guthrie-Morris-Campbell Co.
Parkersburg—Guthrie-Morris-Campbell Co.

WISCONSIN
Milwaukee 3—Neidhoefer & Company

OR WRITE *Mohawk Carpet Mills, Inc.*, AMSTERDAM, N. Y.

who served over four years in the army, made arrangements with the Veterans' Advisory Branch of OPA to manufacture dresses at $10.75 each. He started his plant, entered into a union contract, committed for materials and started production. His dresses were well received by New York stores and he was going along fine, until OPA's Washington office overruled New York and decided that because before he entered the Army he was a salesman of $8.75 dresses, he could not be a manufacturer of $10.75 dresses. His dresses cost him $9.50 each, but OPA insists he can't charge over $8.75."

That looks like the "top".

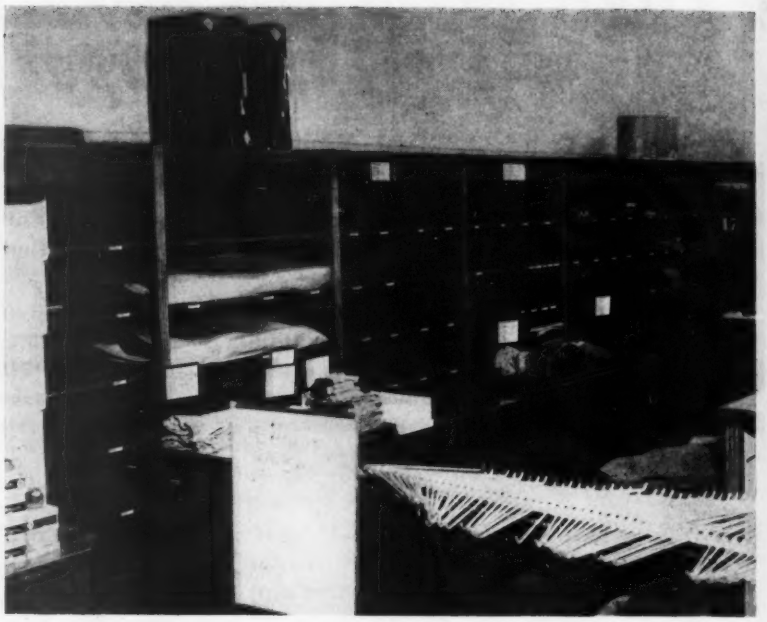
* * *

Drop in Anyway!

Retailers, especially in the small town, are having a hard time getting over to the public the reason why they do not have wanted things in their stocks. Some of the criticisms leveled take the form of serious complaints, while others are just good natured jibes that take on the serio-comic aspect. The latter may be the most difficult to handle as they are more apt to continue while the present situation lasts. Out in Mattoon, Ill., Earl Ross, clothier, capitalized on the situation by advertising the fact that they are the butt of many jokes, because of their depleted stocks. For instance, they said in one of their ads:

" 'Looks like you're sold out'—'When are you moving?'—'What'll you take for the fixtures?' This is a sample of the kidding we have to take all day long since Christmas. Well—you can't blame anybody for kidding us—if you never saw a clothing store without any clothing in it—come in—we'll show you one!" Then they told what they were doing to improve the situation—hunting for goods. Don't get panicky, they advise; they promise to take care of customers just as soon as the postwar jag is over. Concluding, they said: "We're out of this—we're out of that—we're out of most everything—but come in anyway—we still like to be sociable."

Not a bad way of turning an embarrassing situation to advantage.



Nothing but empty shelves—but drop in anyway!

The back of the new Lady Pepperell sheet package contains an informative "Buy-Guide" of facts for customers and retail salespeople.

Research Techniques

The importance of research in store procedure was emphasized last month when the Research Directors of the member stores of the Associated Merchandising Corporation met in a three day conference in New York. These store executives discussed in considerable detail various topics of outstanding interest to the group as to the techniques and applications which might develop new ways in which the Research Directors could be of real help to the various members of their store organizations. Joseph P. Kasper, President of the Associated Merchandising Corporation, pointed out that no store can be successful, regardless of how well it selects its merchandise, unless that merchandise is sold intelligently so that it will stay sold and so that it will be sold on a basis of real local competition.

Carpet Demand

The pent-up consumer demand for floor covering is such, says Howard Hildreth, Mohawk Carpet Mills and chairman of the Merchandising Committee of the Institute of Carpet Manufacturers of America, that five years of capacity production in the carpet industry will be needed to provide retailers with normal inventories.

Perfect Woolens

The well-dressed man soon will be wearing all-wool suits to make life more tolerable in excessively hot weather, says Dr. Donald H. Powers, director of textile research and development for Monsanto Chemical Company. His company's Resloom will enable tailors to make winter suits of lighter weight and greater strength, he predicted.

Trapped in MAP

The hosiery industry is facing more serious problems under the MAP order as increased costs aggravate difficulties, says a special bulletin from the National Association of Hosiery Manufacturers to its members. Many manufacturers, the bulletin says, "succeeded in op-

Illustrating the Dennison policy of modernization with minimum investment

For many years, Dennison has produced equipment to increase the efficiency of marking room procedure without expensive change-overs. That is what is meant by Dennison's Basic Policy—"Modernization With Minimum Investment."

Outstanding examples of this policy are the Dennison Price Remarkers. One model cuts the old price from the ticket while imprinting a new one. The second model strikes a line through the old price while printing the new one, and is used whenever it is desirable to show the two prices. Both of these instruments pay for themselves many times over by eliminating errors and oversights due to illegible, long-hand repricing. They are usually used right on the selling floor.

Dennison Price Remarkers—like all other Dennison equipment—conform to specifications laid down by marking room operators themselves. They are designed to do a particular job in meeting the needs of modern merchandising.

Dennison HEADQUARTERS FOR MARKING ROOM EQUIPMENT

DENNISON MANUFACTURING COMPANY • 52 HOWARD ST., FRAMINGHAM, MASS.

erating during the fourth quarter of 1945 without creating surcharges or with limited surcharges. However, the conditions prevailing now will doubtless result in developing substantial surcharges by the end of the first quarter of 1946, due to steady increases in costs."

Fur News

It's been unusually quiet along the fur front; sufficiently so to make the unsuspecting think that OPA and all other troubles were all settled. But not so. Something has to be done, the buyers tell us, if the fur department is going to continue. Skin prices have gone up so high on muskrats and moutons, they complain, that it is an impossibility to get such coats from manufacturers. He is ceilinged so low he cannot sell them against increased skin costs. Of course, there is the jobber; some have come into the market rapidly as the manufacturers' troubles have developed, say the buyers. You may get some but prices are not what they should be. The boys are meeting with OPA, as this is written.

* * *

Do you ever have trouble with customers failing to recognize their fur coats when you return them after storage or remodeling? The International Registry, Inc., have got it all worked out so "it cannot happen to us." Ingeniously, they have developed an indelible stamping on skin method which never fails, they say. With the stamping they are organizing a central bureau where records of fur coats so stamped will be available for identification as to ownership. With several New York store buyers, we recently watched the stamping process applied to coat skins. The Registry also believes it will serve as a deterrent to stealing.

Retraining Urgent

We don't really appreciate how great have been the changes that have occurred in retailing during the war years until we talk with store executives who have returned after several years in the service. "The thing that impresses me most," said Colonel Bennet A. Meyers, vice-president of the Meyers Arnold Co., Greensville, S. C., "is the apparent disregard for the fundamentals of good retailing: such things as re-order numbers, stock over six months old, proper attention to good selling—because the retailer, particularly the buyers and department managers, have been able to sell most anything they buy. It looks like we will have an intensive period of re-training if

Col. Bennet A. Meyers

the smaller stores are going to hold their own when merchandise becomes more plentiful. Another thing that impresses me about the present picture is that everybody complains in spite of the fact that everybody seems to be making money."

Stores and People

B. S. Hornstein, president of Charles Stores, Inc., played host late last month to three Charles Stores salesgirls who won grand prizes of a free trip to New York in the recent Victory Bond Drive.

* * *

Al F. Witte has been appointed manager of the Retail Stores Department of the Systems Division of Remington Rand. Mr. Witte will direct a continued program of research and development of better administrative controls for retail store operations.

* * *

If you are still looking for an orderly way to pass along nylons to your customers without riots and similar disorder, you may find that the plan adopted by Read's, Bridgeport, Conn., will do the trick for you. We understand it did it for them. Announcing in the papers they had them, they made the sale conditional on sending a post card dated not later than a specified date, requesting the hose and specifying size and length. The hosiery was sent to the customer by mail.

* * *

A Bamberger Chair of Merchandising was established last month at Pratt Institute, Brooklyn, N. Y. The Institute was presented with a check for $5,000 by Arthur L. Manches, executive vice-president for the store. It will be used to finance seven full scholarships for the current year to be given students of the Art School and also to maintain the Pratt-Bamberger Project which includes plans for a lecture series and research laboratory to be established at Bamberger's.

Mid-Year Meetings

Time for mid-year NRDGA Conventions is fast approaching. The divisions, dates and places are:

The Credit Management Division—LaSalle Hotel, Chicago, April 23-25.

The Traffic Group—Brown Hotel, Louisville, June 4-6.

The Controllers' Congress—La Salle Hotel, Chicago, June 17-20.

The Equitable Paper Bag Co. offers to stores without charge a simple slide rule that quickly shows the proper sizes of paper bags to use in all departments. Stores, says Equitable, have saved as much as 40% on wrapping costs by using the proper size of standard bag for each sale. It will send the Size Selector to stores on request.

TRANSPORTATION PROBLEM?

Otis elevators, Otis escalators, Otis trained men and the facilities of the manufacturers of more than half of the world's elevator equipment are all available to assist you or your Architect in solving any vertical transportation problem.

Otis Passenger Elevators with up-to-date dispatching methods are the recognized answer to congested elevator traffic conditions.

Otis Escalators are used where large numbers of persons are to be carried from floor to floor in comfort and without crowding.

Otis Freight Elevators with a variety of control systems are designed to satisfy the most exacting requirements of floor to floor freight handling.

For the most efficient and economical service in vertical transportation — for a few stories or many — call your nearest Otis Representative today.

Otis ELEVATOR COMPANY
OFFICES IN ALL PRINCIPAL CITIES

THE CHALLENGE TO CREDIT MANAGEMENT

Speeches at the Credit Management Division session of NRDGA's 31st Annual Convention. Session Chairman: Clarence Wolfinger, *Credit Manager, Lit Bros., Philadelphia.*

A FOUR-POINT PLAN FOR CREDIT SALES PROMOTION

Edward F. Higgins,
General Credit Manager,
Allied Stores Corp., N. Y.

THERE ARE four steps in the operation of this Credit Sales Promotion Campaign.

1. To increase your charge account list by aggressive and decisive solicitation of new accounts.
2. To attempt to change over all other types of credit customers to regular charge account customers.
3. To reawaken dormant or inactive accounts and again put them on the sales production line!
4. To establish different plans to lead your cash customers into some form of a credit participation with your store.

1. Solicitation of New Accounts:

First you must determine *whom* you wish to solicit. Naturally, you want *good risks*. By taking the real estate tax list of your urban or suburban localities, you start with a group of prospects who already have supplied a part of the necessary credit background. Of course, you may select any list you prefer, but we will use this one as an example.

You proceed as follows:

1. Check the list to your master records to determine whether or not the prospect is already on your books.

2. Check those not already on your books to your permanent, previous solicitation list so that there will be no resolicitation until a six-month interval has lapsed.

3. Now you are ready to send a solicitation letter. Be sure this letter that you send is specifically aimed at the group you are soliciting.

4. Having sent the letter (and here let me remark that the solicitation by mail rather than by telephone is for the definite purpose of *putting an application blank and return paid envelope directly into the hands of the prospect*), we file the record card in a permanent solicitation file.

This permanent solicitation file *must be established*, as it is the key to all future operation, and every charge account solicitation henceforth will be placed therein and *never* removed by anyone except for the following reasons: (1) Customer accepts your offer, and an account is opened; (2) Customer accepts your offer, and an account is refused; (3) Customer accepts your offer, and the record is placed in the "File No's."

5. If there is no reply to the solicitation letter, after six months *another* solicitation is sent, which is known as the special repeat solicitation, and with this goes an appropriate letter. After the second period of six months has lapsed, with no reply, *another* solicitation is mailed and another different but appropriate letter is sent with it.

It is well to state at this point that experience has proven that resolicitations have brought the following results: The first resolicitation brought nine per cent returns in two months. The second resolicitation of another set of accounts brought eight per cent of returns in one month.

If there is no response to this *second resolicitation*, then this account card is pulled after a reasonable period of time.

2. Changing Other Types of Credit Customers to Regular Charge Account Customers:

1. PAID UP REGULAR BUDGET ACCOUNTS. These cards are turned over to the charge account promotion staff from the accounts receivable department monthly. We review these budget cards to make sure that they are paid "okay" as agreed.

If they are, we send them a definite solicitation letter, with charge account application card, and return paid postage envelope. The record of these names is now placed in the permanent solicitation file and handled exactly as the new charge account solicitations, previously explained, and they become a part of the regular solicitation plan.

2. PAID UP MERCHANDISE BUDGET COUPON ACCOUNTS. These are treated exactly the same as in Step 1 on the regular budget accounts and handled all the way through in the same manner.

The regular budget account which has been paid up needs no further credit investigation if it has amounted to $50 in the first transaction. Also you must bear definitely in mind that in soliciting these two classes of credit accounts, you are soliciting directly a customer who has already expressed an intent to ask you for a form of credit participation. Therefore, these types of customers should show most favorable results.

3. Reawakening Dormant or Inactive Accounts:

Here is a phase of credit sales promotion which is most important. It is also a phase of promotion which has been worked on by many direct mail account agencies, with many and numerous suggestions, some expensive, some inexpensive, in order to sell the retailer a proposition. But in my opinion there is no mystery about the solicitation of inactive charge accounts, and it is merely a question of *setting up a system and adhering faithfully to the application of said system*. The following is the recommended plan:

"Honestly, Isabel, I feel like Christopher Columbus ...

. . . these charming Rosemary Tablecloths are *such* a discovery! That old fogey idea of mine—that really good-looking napery was beyond our budget, and always had to come from abroad—is definitely 'out the window'... effective today! From now on I'm all for these Rosemary products and I'm going to have some for everyday use and a few for special parties."

Yes, modern-minded Americans *are* discovering how easy it is to find Tablecloths and Napkins "made *right* in America" that add beauty and distinction to table-settings for all occasions. They're learning, too, to look for the garnet-and-gray Rosemary Label, to be sure of quality, smart styling and top value.

ROSEMARY SALES

A Division of Simmons Co.

40 Worth St. New York 13, N. Y.

TABLECLOTHS and NAPKINS "made RIGHT in America"

Rosemary

Other "Rosemary Products—made RIGHT in America" include

BEDSPREADS · WORKSHIRTS · MATTRESS TICKINGS · FLANNELETTE · DECORATIVE FABRICS

Edward F. Higgins

1. Any account which shows a blank bill for a period of two months receives a bill the third month upon which there is imprinted a cartooned message which conveys the idea—"You are missed. Have you been neglected? . . . etc."

These cartooned messages should be directed from a point of view of timeliness and interest. For example, Easter, Mother's Day, Christmas, Back to School, etc.

2. If these accounts do not show an awakening for another period of two months, on the third month *again* a message is sent. This is another message substantially the same in character as the first message.

3. After *another* period of two months, if no reawakening has taken place, a *third message* is sent to the inactive customer. This is in the form of a personal letter addressed directly to the customer, and signed by our Director of Accounts (who is in reality our Credit Manager, but rather than use the word "credit" we refer to him in customer relationships as "Director of Accounts").

4. The *fourth step* is a repeat of Step 1 keyed to the times, of course.

5. The *fifth step* is *an exact repetition of Step* 2 (of course, keyed to the times).

6. The *sixth step* is *another personal letter*, like the first personal letter in step 3, but signed this time by the president of the store.

It may be interesting to note also that in this inactive account work not only has experience shown that we reactivated 67 per cent, but a store also brings to light many customers' grievances and many adjustments which can be satisfactorily settled. It has been suggested at times, as an economy, to carry only the first three steps through on inactive accounts, *but I urge you most strenuously* not to fall for this false economy. It has proven otherwise, and no customer has ever been insulted by the earnest endeavor of a store to solicit his account.

Results from this six-step resolicitation have proven to be as follows: After three steps one thousand names were checked, and 15½ per cent of these had reopened their account by purchasing. One thousand different names were checked *after six steps and* 51.5 *per cent* of these customers had purchased and reopened their accounts, proving conclusively to us that the six steps were necessary.

Another point of great importance is this—any customer who has seen fit to reply to your inactive solicitation *must* be written a personal letter in reply to her communication. Do not carry this step to the point of customer participation and then disregard the customer's interest.

4. Plans to Lead Your Cash Customers into Some Form of Credit Participation:

1. Mail Orders. All mail orders received are solicited for a new charge account sent directly to the customer with an application form and return paid envelope.

2. Telephone Orders. All telephone orders are alphabetically catalogued and a charge application form and return paid envelope sent to each customer.

3. C.O.D. handled the same as No. 1 and No. 2.

4. Direct Mail. In our monthly bills we have a definite form of mail order solicitation folder which carries 40 suggested mail order items. Also on the cover of this monthly bill insert is written a story stressing the importance of having a regular charge account at our store.

5. Radio. About one week in every six we go on our radio programs with a direct appeal for new charge account customers, budget account customers, and merchandise coupon account customers. This is particulary desirable if the timing is proper and the approach well directed.

6. Direct Advertising in Newspapers. A series of 150 line advertisements are run every second week throughout the year in the local papers. These bear a humorous type of approach, and the appeal is directed to different types of customers in each different advertisement. For example, to the "woman who works", to the "shut-in" who finds shopping inconvenient, etc.

SOLICITING ACCOUNTS THROUGH NEWSPAPER ADS

Albert S. Kleckner,
Credit Manager,
The Namm Store, Brooklyn, N. Y.

CREDIT advertising in newspapers can be dignified and be made to reflect the character of the finest store. The newspaper, because of its basic essentials, coverage and speed, can do a very satisfactory job in a very short time, and under present conditions, time becomes an important factor. Some stores have been soliciting new accounts by newspaper advertising for years with very definite success, but there still seems to be a reluctance on the part of credit men and management in some stores to attempt this type of campaign. The first objection seems to be the cost.

It is true that newspaper space is expensive. And the immediate amount of actual returns sometimes seems to be disappointing in proportion to the amount of money spent.

However, from my experience, I have found that results from this type of campaign are secured weeks or even months after the advertisement has been placed. It is also true that what we may be assuming are normal requests for accounts with no copy of the ad attached, or no reference to the ad are indeed the results of an advertisement which appeared in one of the papers.

Use of the newspaper should be tied in with other methods that the store has been using. Properly coordinated, they can secure for the store a large number of accounts. A co-ordinated plan of solicitation will give the store the tremendous

NOW

EQUITABLE
PRODUCES

ORDER OUT OF CHAOS
with the BAG SIZE SELECTOR

¼ ACTUAL SIZE

Free!

Indicate exact name or names of individuals. Use the Coupon or letterhead. Only one Selector per name! Maximum of five to an organization

What 19 sizes of paper bags will wrap Take With and Send articles most efficiently? How should these 19 universal sizes be assigned to the 47 main departments of store merchandise?

Equitable, manufacturer of the largest variety of paper bags in the country, has arranged the answers in the Size Selector — a unique device that puts the facts about paper bags at your fingertips.

Here's the handiest aid you ever saw for straightening out the problem of wrapping properly — yet without waste. Some stores have saved as much as 40% on wrapping costs by concentrating on the sizes of paper bags recommended automatically by the Size Selector.

While they last! Get your Size Selector. First Come, First Served!

Equitable
PAPER BAG COMPANY, Inc.
Mills at Orange, Texas
47-00 31st PLACE LONG ISLAND CITY 1, N. Y.

Important! Mail Coupon now

EQUITABLE PAPER BAG CO., INC.
47-00 31st Place Long Island City 1, N. Y.

Send ..... Equitable Paper Bag Size Selectors
Name..... Title.....
Store.....
Address.....

coverage of families which can only be obtained by the large circulation of the newspaper plus the selected coverage which is obtained by the use of the plan. It must be remembered that the same paper is not read in all the homes, nor is it advisable to cover every paper on the same day.

Newspaper advertising does not necessarily have to be reserved for the solicitation of new charge accounts only. It should not be overlooked where items can be purchased on the installment plan. In the sale of fur coats, we often successfully use a statement in our ads to the effect that an item can be purchased on four different plans,

Albert S. Kleckner

viz: (1) Cash; (2) Layaway; (3) Charge account; (4) Convenient payment.

A well presented charge account solicitation can take the place of an institutional ad, building good will for the store and soliciting accounts at the same time. Institutional advertisements can be used to revive old inactive accounts. A reactivated account is as good or even better than a new one.

The preparation of a newspaper advertisement is a specialized art. The smart credit executive who contemplates a newspaper campaign should insist on having the advice of his advertising or sales promotion manager, or some outside agency which specializes in this type of work. This will bring about complete cooperation between the two divisions, and result in the store getting the best response from this endeavor.

There is good advertising and poor advertising, and the cost is the same. Your advertisement must have the same sales appeal and pulling power of any advertisement for the sale of merchandise. I firmly believe that the elimination of an advertisement is a wiser policy than to run a poor or flat ad.

It is true that all stores are not alike and do not have the same appeal. They differ in the type of merchandise they have to offer, in merchandising policies, store policies, location, etc. Therefore, the type of newspaper you select for soliciting accounts depends not so much on the circulation of the newspaper as it does on the possibity of its reaching more of the type of customer to which your store caters. It would be unwise and prove costly for a store to step out of its class. In this, the department store has a definite advantage because it carries all types of merchandise in various price lines, and it caters to all classes of customers.

My experience with newspaper solicitation has shown that, contrary to general opinion, the number of rejected applications has not been excessive. A great deal of credit for this must be given to the well organized and efficiently operated Retail Credit Bureaus which exist in every large city. Because of their extensive method of keeping records and their educational programs on the advantages of a good credit record, we have found that the prospective applicants whose records do not measure up to standard realize the futility of applying for an account. The National Retail Credit Association is contemplating a consumer educational publicity campaign on a national basis. The results of this type of work will unquestionably show up in a smaller percentage of rejected accounts, and to the advantage of every credit-granting retail store.

Of course, stores with junior charge accounts have an advantage in that they can offer these to the weaker applications which are received. The number of junior accounts opened will be very small, but nevertheless, it gives the store an opportunity to accept the account instead of refusing the request.

Some method must be used to show what papers or editions of papers are bringing the best results. Therefore, it is advisable in preparing your advertisement to use some code in the corner of the ad which will designate the paper or edition it appeared in. A record should be kept of the results, so that future campaigns can be more properly handled and those papers give preference which showed results.

The style and type of advertisement can be an apparent factor in the results. A direct request for new charge accounts without any illustration or reference to any feature of the store's operation will prove the least successful.

An advertisement for charge accounts can be so worded as to embody both an application form and a write-up on the advantages of having a charge account. To give it more life and appeal, it should have an attractive bit of art work. Of course, the cost will be greater but in planning a promotion of this type, it is advisable not to seek the cheapest way, as this sometimes becomes the most expensive.

A charge account ad combined with the regular store advertisement of merchandise could greatly influence the results. In planning this type of advertisement, it is advisable to stress the more expensive items in the store ad. The fact that merchandise is advertised gives the advertising department an opportunity to do a certain amount of art work, which will always make advertisements more appealing. You will also find that there will be a number of requests for accounts where the customer will also place orders for the advertised merchandise. It is reasonable to assume that some customers may be influenced in a decision to purchase the item by the convenience of charging it.

Stores do not take full advantage of the opportunity to let the buying public know that new charge accounts are always welcome. Why not arrange for the consistent use of timely messages in all regular merchandise ads? Continual repetition is bound to make an impression sooner or later.

When customers forget...

complete files of sales tickets are at your fingertips with Recordak Salescheck Billing

YOU CAN'T CHANGE CUSTOMERS. Despite anything you do, they'll still come in to question charges . . . *without* bringing in their statements.

But don't let this worry you. Don't let it slow down your adjustment service. Do what the smartest of your competitors are doing to keep this operation moving smoothly. Put in Recordak Salescheck Billing.

This will enable you to do two things . . . (1) to send out the actual sales checks with statements—thereby reducing adjustments and customer misunderstandings to a minimum . . . (2) to keep on hand a Recordak microfilm file of all sales checks and statements which can be referred to quickly and easily when customers come in.

Now used in store after store after store

Look around you . . . and see how many leading stores now use or plan to use Recordak Salescheck Billing. Then, to bring yourself up-to-date on the low-cost machine that has pioneered the application of modern microfilming to basic business routines, write for the new, free book—"50 Billion Records Can't Be Wrong." Recordak Corporation, Subsidiary of Eastman Kodak Company, 350 Madison Avenue, New York 17, N. Y.

Mail coupon for this FREE book

RECORDAK (*Subsidiary of Eastman Kodak Company*)

originator of modern microfilming —and its uses in retail selling

RECORDAK CORPORATION
350 Madison Avenue
New York 17, N. Y.

Please send me your new book about Recordak, "50 Billion Records Can't Be Wrong."

Name_____

Store_____

Street_____

City_____ State_____

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Timing is another factor which has considerable bearing on newspaper solicitation. A campaign timed to appeal at some significant date such as Easter, graduation time, or before Christmas, will have a much better chance of getting results—customers are in the mood for purchasing merchandise, there is usually more money spent than normally, and a charge account fits right into the scheme of things.

In laying out the application form in a newspaper ad, care must be taken to see that the request for credit information is presented in a manner which will leave no doubt in the mind of the applicant as to what has to be done. Nevertheless, this application form should be simplified, so that it requires the customer to give only a minimum amount of necessary information. As a matter of convenience, and in order to expedite the authorization of the account, we also request the applicant to write his or her name (not print) and we use the application as part of our credit history record. The signature on the application form is used for verification purposes. This eliminates the necessity of sending another form to the customer for her written signature when the account has been approved.

A card of acknowledgment should be sent to all requests for charge accounts which are received as a direct result of a newspaper advertisement. This should thank the customer for her interest and assure her that her request for an account will be given immediate attention.

We make a practice of clearing through the credit bureau all newspaper applications for credit accounts, as this method of securing charge accounts eliminates a very important factor in the opening of the account—the personal interview—and the impression received in an "across the desk" contact. It makes the investigation more costly, but is a precaution that pays dividends in the long run.

When an account has been approved and a letter of acknowledgment or the coin is sent to the customer, it is important that this letter contain or that there be enclosed in the envelope, a circular setting forth all the terms and conditions under which the account has been opened. This will eliminate any possibility of the customer misunderstanding the terms and method of operation of the account which she has been offered.

Approved charge accounts which are opened through newspaper advertisements should be classified separately, so they can be given special attention. Through your newspaper circulation which covers such a wide area, you will receive applications from people who live a long distance from your store, and even from those who live near by, who may never have visited your establishment. It is necessary that special consideration be given to these customers on store mailings of special sales and events. A considerable amount of mail order business can be secured this way.

USING THE TELEPHONE TO PROMOTE CREDIT SALES

Sig L. Weisskerz,
Credit Manager, The Union, Columbus, Ohio

THE CREDIT department today and tomorrow must play a more important part in the operation of a retail store than it has ever played before. Not only must credit executives supervise all the functions expected from them in the ordinary sense, but they *must* (not should) do the planning and executing of all credit sales promotions. In order to do this, they must have supervision of or very close contact with: (1) The Addressograph Department; (2) The Sales Promotion Department in so far as it pertains to credit sales. (3) The Public Relations Department; (4) The Adjustment Department.

To do a good job in our Billing Department, we keep close scrutiny over the Addressograph Department. At the end of the month, active accounts are segregated from the inactive ones—we do not use ledgers but use statements (with stub) in conjunction with the Recordak—so it's very easy to segregate the active statements from the inactive ones.

At the end of the second month, when a biller has two statements for the same customer, we immediately know there has been two months' inactivity on that customer's account—a form is sent to the addressograph department instructing them to transfer the plate from the active to the inactive file.

A message is printed on the inactive blank statement and sent to the customer together with all advertising the same time our monthly statements are mailed. This procedure is followed monthly on all accounts showing two months' inactivity. The revival of an account is much easier if you work on it at once instead of waiting for a lapse of six or eight months.

The other blank statement is kept in the billers' files for another 30 days. If the account has not been used, the statement top showing the name and address of the customer is sent to our Public Relations Department. The telephone is then used.

Public Relations

The telephoning is done by a young lady in the Public Relations Department who has a most pleasing personality.

Her opening conversation is something like this: "Mrs. Jones, this is Mrs. Fisher at The Union speaking. I have noticed it has been some time since you have been in to see us." This gives the customer the opportunity to tell why she has not been in.

If the inactivity is due to a complaint or an unsatisfactory adjustment, the correction or adjustment is made immediately by the young lady calling the customer. (She has this authority because when she called the customer, she left herself wide open for complaints.)

Too much stress cannot be placed on the fact that when a customer's patronage is solicited either by phone or mail and a complaint is registered, it must be adjusted then and there.

When a customer has been called on the phone and has not reopened her account within 60 days, she is called again. This time she is told about new merchandise or the very much wanted, hard to get merchandise which we might have in stock. Many times an order is taken over the phone at the time of the solicitation.

Personal Shopper

Many people we find are ill and cannot get in to shop. They are told about our Jean Adair who is

WHEREVER YOU GO—
YOU SEE BURROUGHS MACHINES

This installation of Burroughs machines in the Indiana National Bank, Indianapolis, is just one of thousands found in offices throughout the world.

Whether the need is for one all-purpose machine for many jobs, or many machines for one job—the broad range of adding, calculating, accounting, statistical and cash handling machines developed by Burroughs gives business concerns a flexibility of choice that assures maximum efficiency and productivity from a minimum investment in equipment. That business concerns, large and small, have found it pays to do business with Burroughs is amply reflected in the fact that you see Burroughs machines wherever you go.

BURROUGHS ADDING MACHINE COMPANY
DETROIT 32, MICHIGAN

1st **Burroughs**
IN MACHINES
IN COUNSEL
IN SERVICE

FIGURING, ACCOUNTING AND STATISTICAL MACHINES • NATIONWIDE MAINTENANCE SERVICE • BUSINESS MACHINE SUPPLIES

Sig Weisskerz

our personal shopper who then calls the customer at pre-arranged intervals to see if she can be of service. Many accounts have been revived through this medium and have developed into fine customers. We do not limit these phone calls to the City of Columbus, but call within a radius of 50 miles.

I am a firm believer in the positive form of solicitation. I believe in telling the customer he has been missed. I don't believe in asking him if he has stopped buying in our store because something, somewhere, went wrong. In a majority of cases, complaints and suggestions will come voluntarily. Our finest results have been obtained when we talk about merchandise rather than generalities.

HOUSE-TO-HOUSE SOLICITING OF NEW CREDIT ACCOUNTS

Charles Sanger,
Credit Manager, Kresge's, Newark, N. J.

THERE are many people who are not credit-minded. House-to-house solicitation has more or less broken through this barrier. In many instances, a housewife will give more information more freely to a solicitor in her home. Many women who will not voluntarily open a charge account while shopping in a store, like the personal touch of the solicitor's invitation to open a charge account.

If a store contemplates a house-to-house solicitation for accounts, it must consider whether it is to be done by an agency or conducted by the store itself, based on which would be more feasible to its set-up. In the case of an outside agency, which we are employing in our campaign, solicitors are hired by the agency subject to the approval of the store. Usually they are a group of women above the average in intelligence, neat and conservative in appearance, with one in charge as supervisor. The housewife is usually more receptive to a woman solicitor than to a man, especially if a morning call is being made.

Training the Solicitors

The training of the solicitors is very important. They must be made thoroughly familiar with store policies especially. Next they must be taught how to obtain the necessary information on an application as tactfully and as diplomatically as possible. They should also be given some information on lines of merchandise carried by the store which may be used as selling points.

Proper credentials for solicitors may be in the form of a letter or card introducing the solicitor as an authorized representative of the store.

A great deal of thought has been given to the method of paying these people. They may be paid a straight commission, straight salary, or salary and commission. A straight commission has a tendency to induce high pressure methods which defeat the purpose of a whole campaign from the outset. A straight salary basis lacks the necessary incentive for volume. The plan of salary plus commission has proven to be the most satisfactory.

If a store decides to conduct a campaign itself, rather than through an agency, practically the same procedure in hiring and paying may be followed.

After the proper training of personnel has been accomplished, the next step to be considered is the territory to be solicited. A desirable area should be selected, and its coverage planned so there will be no overlapping. It should be completely canvassed before the solicitor is permitted to leave it for another section. It is advisable to have small maps on which streets can be checked off as they are completed indicating the progress being made.

How Accounts Are Opened

All applications are collected daily by the crew supervisor who in turn mails or brings them into

Results of Telephone Solicitation at The Union

Year	Accts. Called	Accts. Reopened	% Reopened	Average Sale	Cost per Account
1938	5600	3080	55%	18.05	37¢
1939	3400	1991	57%	18.00	52¢
1940	3861	1721	44%	15.90	72¢
1941	4818	2901	60%	30.00	44¢
1942	4500	2970	63%	46.00	43¢
1943	4100	2460	60%	51.00	55¢
1944	4700	1700	36%	47.00	45¢
1945	2800	1420	50%	62.00	42¢
		LONG DISTANCE			
1944	978	481	50%	27.00	
1945	1868	1033	55%	29.00	

"It was all so clear a moment ago"

But of course the lady has a right to change her mind! Any buyer has. Change is essential to staying modern.

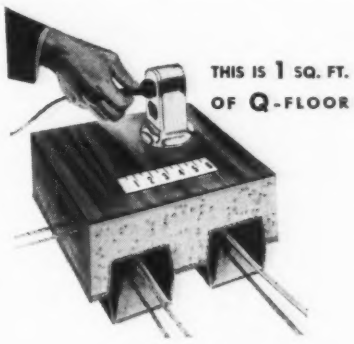
Change of floor layout is part of good retailing.

Quick-change of floor layout is a built-in convenience that is one reason why Robertson steel Q-Floors increase the earning power of stores. Q-Floors—putting the matter simply—are steel cells six inches apart and crossed over by raceways which carry any kind of electrical wiring. The steel subfloor is covered by a thin concrete fill and takes any kind of surfacing.

Q-Floor's unrivaled value to retailers is that an electrician can drill in any six-inch area and establish an electrical outlet—literally—in a matter of minutes. Without trenches, or muss, or fuss.

This means to you that non-selling floors can be changed to selling floors overnight. And vice versa.

During construction, Q-Floors also increase the earning power of a building because they are *Quick-in*. They reduce building time 20% to 30%. This has been proved on thousands of installations by the H. H. Robertson Company of Pittsburgh, Pennsylvania. Q-Floors come on the job cut ready to install. Two men can lay 32 sq. ft. in half a minute. The dry, clean, Q-Floor becomes an immediate platform for all other trades, and freezing weather is little handicap. Your income starts sooner on Q-Floor.



Especially in the addition of mezzanines is Q-Floor ideal for stores. Noncombustible, dust-free and dry. No forms or shoring.

There is no premium on cost. It's right in line. Consult your architect or write directly to:

H. H. ROBERTSON COMPANY

2410 Farmers Bank Building
Pittsburgh 22, Pennsylvania

Offices in 50 Principal Cities
World-Wide Building Service

Charles Sanger

the store. A good solicitor should average between 20 or 25 applications daily with an average of 10 per cent in declined accounts. A small, simplified type of application is best because a long elaborate form is apt to make the customer reluctant to sign it.

When the applications are received, they are turned over to the New Business Department. A daily record is kept of the number of accounts each solicitor has taken so that she gets proper credit. They are then entered in a book alphabetically and by date. A 3 x 5 card is typed for each application and filed in our master file. The original applications are then sent to a clearance bureau (in our city a separate bureau from the regular credit bureau.)

When the applications are received from the clearance bureau the next morning, then they are referred to the Divisional Credit Managers for analysis, who order whatever credit information or reports are necessary, making the notation right on the face of the application. The reference clerk then records the information ordered and forwards the original applications to our regular credit reporting bureau.

When the applications are returned from the bureau with the credit information, the reference clerk checks off her records and refers them to the Divisional Credit Managers for approval. They are then returned to the New Business Department and records are marked accordingly, including the master index. Records for the Billing Department are also typed by this office, and stamped to indicate they are solicited accounts.

To keep an accurate and accessible record of the campaign, our ledger cards are tabbed in addition to being stamped, making it very easy for us to pick up any information we may require, particularly the volume in dollars and cents. We are also able to follow up on inactive accounts, which we do every month, and if they have not been used after a period of 30 days from the date of opening, we send a letter.

Our campaign has been running for eight months, and about 90 per cent of the applications received have been approved, and of the 90 per cent about 45 per cent became active with an average sale amounting to $42. This does not include the number and dollar volume of coupon accounts opened which were too light for regular accounts.

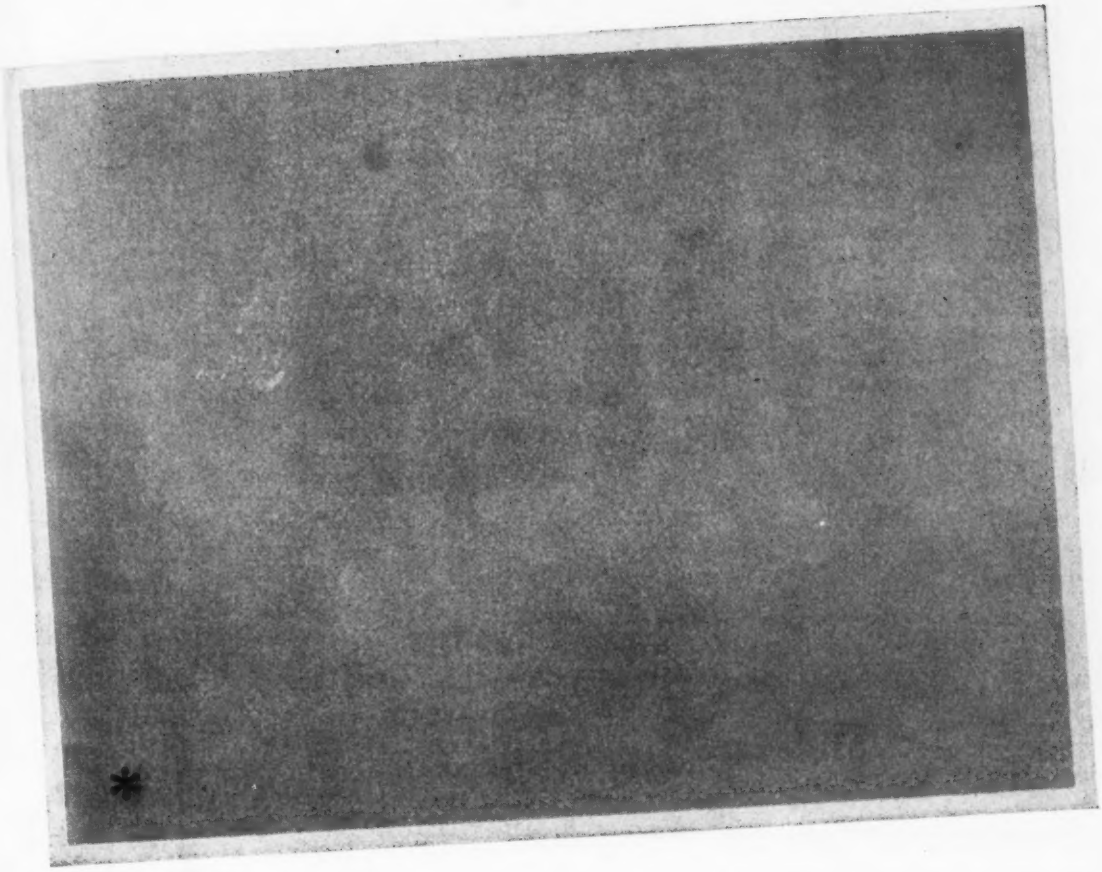
Speaking of coupon accounts, I have been asked to mention again the successful solicitation which we do on coupon accounts. We send special letters at various seasons of the year, at Easter, vacation and Christmas, to our good paid-up deferred and coupon account customers, offering them an account without the usual service charge of $1 on each book of $20. This offer is good for only a certain period during the seasons mentioned. The results from this type of solicitation are very gratifying indeed. Our Christmas solicitation showed that from the number of letters sent, we received a 13 per cent return, and there were many customers who took more than one book, increasing our dollar volume.

Frederick & Nelson Expansion Begins

IF it takes magic to create sales, Frederick & Nelson, foremost Seattle department store, has just ordered 5 million dollars worth of prestidigitation with which to make friends and influence customers. This is one of the largest postwar retail expansions yet announced in the West.

Hughston M. McBain, president of Marshall Field & Co., parent organization of the Seattle institution, has announced that his organization will launch immediately the $2,000,000 first phase of the program, involving construction of

Architect's visualization of Frederick & Nelson at completion.



THE MOST IMPORTANT PICTURE IN YOUR BUSINESS

The profits in your business depend on something that can't be photographed* or even seen. It's that intangible called "good will."

You spend years to build it up — and it can be knocked down so quickly. That's why you should make sure that your insurance company knows how to help you *hold* good will. Remember, a customer feels he is dealing with *you* when he deals with your insurance representative.

You can trust your store's good will to Liberty Mutual. For Liberty Mutual claimsmen are trained to handle every customer with skill and tact — whether the claim seems fair or not. They know how to help smooth the flow of merchandising.

Liberty Mutual deals directly with policyholders and claimants through full-time, salaried employees. You never have to worry about third-party delays or misunderstandings. Your Liberty Mutual claimsman truly represents you, because our mutual company serves no other interests than those of our policyholders.

We'd like to tell you more about this important service . . . tell you too, how we have been able to cut insurance costs for many leading department stores and specialty shops throughout the country. For information—and an estimate of your savings—write to Liberty Mutual, 175 Berkeley Street, Boston 17, Massachusetts.

LIBERTY MUTUAL
INSURANCE COMPANY
HOME OFFICE: BOSTON

Smoothing the flow of merchandising

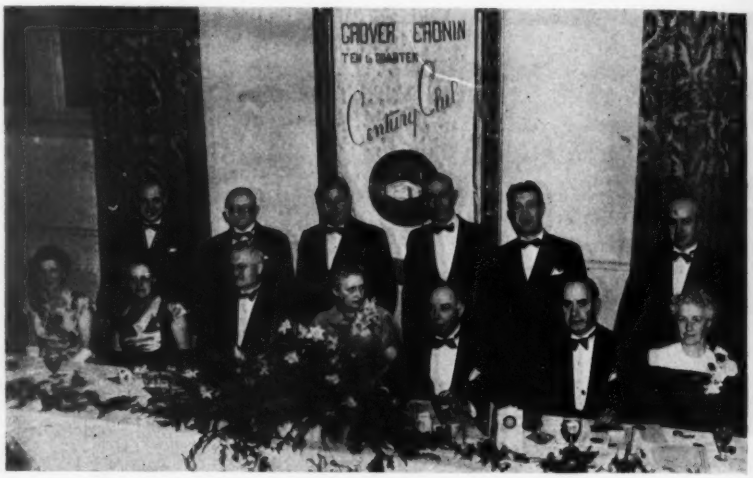
a portion of three floors atop the store's present five-story structure, installation of wide escalators and new high-speed elevators, removal of the freight concourse to the basement level to increase main-floor selling space by 20 per cent and to install high-capacity air-washing and ventilating equipment – together with daylight illumination –on the main floor.

The second phase of the program –final decision on which will be deferred until early next year–will include completion of the new upper floors, extension of lighting and ventilating equipment to all floors, and dramatic improvements in the store's exterior.

The entire program will be carried out without interruption in store service, officials said, and dislocation of normal merchandising procedure will be small.

Skidmore, Owings and Merrill, Chicago architectural concern specializing in store interiors, collaborated with John Graham, Seattle designer of the present store, to prepare sketches for the modernization and enlargement.

Grover Cronin Ten to Quarter Century Club



100 per cent attendance at the first meeting

GROVER CRONIN, INC., Waltham, Mass., has recently formed a Ten-to-Quarter Century Club for 52 members of the organization who have been in full time employment there for ten years or longer. The only officers of the club are Grover J. Cronin, honorary president and John J. Murphy, an employee of the company for 32 years, acting president for one year. The first banquet and annual meeting of the club was held Monday evening, January 21 at the Hotel Beaconsfield, Brookline. Response to the invitations was 100 per cent.

Souvenir programs of the proceedings, personalized in gold lettering, made very attractive place cards. The circular emblem of the club employs the traditional Grover Cronin colors, gold and blue. In the center is a raised facsimile of the store in gold. Around the blue border, in gold letters, are the words, "Grover Cronin Ten to Quarter Century Club."

This emblem appeared on the cover of the programs, on a beautiful satin banner, which hung behind the head table, and also on solid gold pins, personally presented to each member by Mr. Cronin. Twenty-five persons employed from 10 to 15 years were the first to receive their pins. Next, those serving with the organization 15 to 20 years were awarded the blue and gold pin set with a ruby. A similar pin set with an emerald stone was received by those whose years of service ranged from 20 to 25 years.

The highlight of the evening was the presentation of gold and blue pins set with diamonds to seven members who have served 25 years and over. They also received gold wrist watches.

THE FACTS ARE AVAILABLE:

Every job in your organization can be objectively analyzed, clearly specified, and accurately evaluated.

PUT THESE FACTS TO WORK:

In the form of a good job evaluation they can make the salary commensurate with the worth of the job • eliminate inequities in salaries • dispel suspicions of favoritism • serve as an objective basis in bargaining • determine appropriate lines of promotions • and establish employee confidence in management.

JOB EVALUATION IS AN EFFECTIVE TOOL OF MANAGEMENT. BUT, AS WITH ALL TOOLS, ITS EFFICIENCY DEPENDS ON THE SKILL AND EXPERIENCE WITH WHICH IT WAS DESIGNED AND CONSTRUCTED.

KENNETH A. McINTYRE ASSOCIATES

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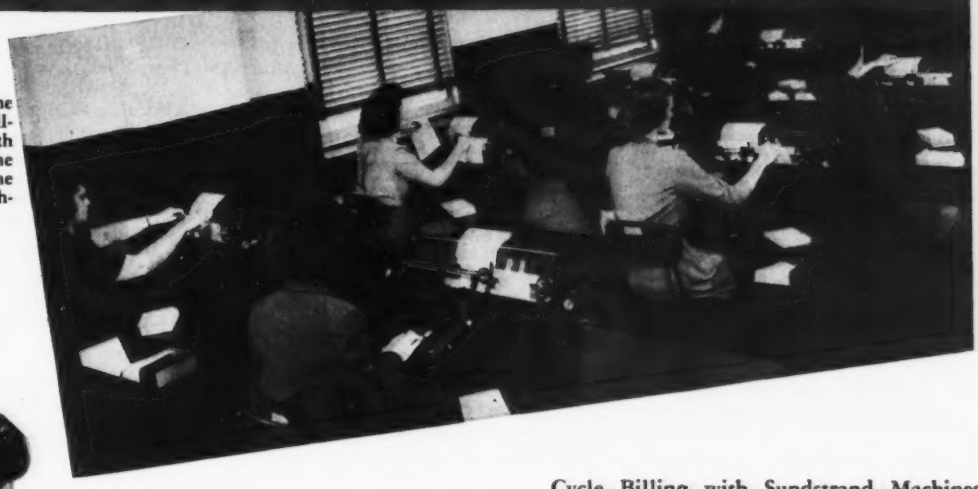
installs 7 Sundstrand CYCLE BILLING MACHINES



Higbee's seven-machine Sundstrand Cycle Billing installation. With these new machines the statements are in the mail promptly and without overtime work.

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Cycle Billing with Sundstrand Machines enables the Higbee Company of Cleveland to keep over 175,000 charge accounts up-to-date . . . with an ample reserve capacity to take care of seasonal peaks. Overtime and month-end peak loads are now problems of the past.

The simplicity of Sundstrand's "one hand operation" keyboard is unsurpassed. The ten numeral keys are operated by the fingertips of one hand . . . absolute minimum hand travel.

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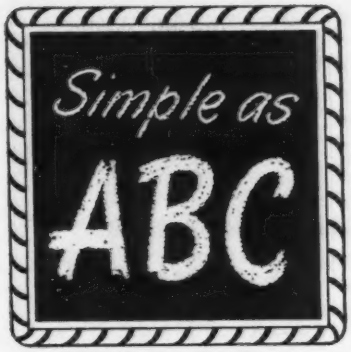

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RAND McNALLY
BUDGET COUPON BOOKS

Art Needlework

(*Continued from page* 22)

illustrated here displays twice as much merchandise as a similar size department under present methods. In this way, occupancy expense can be cut, sales can be increased and selling time reduced . . . contributing greater net profit to the store.

I have tried to give a birdseye view of the "Ulmann Plan" for Art Needlework departments. It is the result of more than two years of intensive research. To enable merchants to make use of the scientific principles embodied in the fixtures we have designed, we have prepared full size blueprints of each fixture so that store carpenters or fixture builders can make the units. The blueprints are available at only the cost of the actual copies.

There are still other classifications in the Art Needlework department which we could not study because of merchandise conditions. These, of course, will be studied as the situation changes. Such studies will include efficient methods of stock control, salespersons' training, instruction rooms and others.

This Camouflaged Inflation

(*Continued from page* 19)

the retailer must be allowed a fair profit. It was *never* the intent of Congress that the Price Control Act should control fair profits. During the war, everyone was happy to have his profits restricted, not only as an act of patriotism, but also as a matter of enlightened self-interest. First, every American who pays taxes was glad to see the gigantic cost of war limited as far as possible. And then there was early and general agreement that—this time—there should be no war profiteers.

That is why manufacturers wisely and promptly accepted the principle of war contract re-negotiation. I make mention of the fact that the various price adjustment boards always allowed manufacturers a fair profit on their war production.

We merchants, more than anyone, want to see fair price-tags on our goods, and sound merchandise on our counters. We are the public's purchasing agent. We expect to be in business for a long, long time. Do not think for a minute that we can dare be short-sighted in our views. Three months of quick and excessive profits would be the most disastrous thing that could happen.

If we get full production going, prices will soon take care of themselves. That is the crux of our position—to permit full production, OPA should allow modest increases in price to established manufacturers, who have the capacity to produce in great volume but who cannot do so under the ceilings and regulations which encompass them. Shoddy substitutes will then be driven off the market, and the consumer will receive greater dollar value. Living costs would thereby be reduced. I can think of no better way to defeat the present "Camouflaged Inflation."

Let me again state that we do not want price controls abolished immediately. We only ask a correction of the flaws in the program—and legislative standards to prevent a continuation of the present chaos. The longer present scarcities continue, the greater will be the danger when price controls finally are removed. Wisdom should lead OPA to encourage production just as much as possible while it still retains control over prices.

Time for Congress to Act

We have reached the point where we must rely on the Congress for the framing of more reasonable and realistic standards on the entire problem of production and prices. In recent weeks members of both Houses have shown an increasingly strong interest in present conditions and in the clumsy manner in which OPA is dealing with the nation's most pressing problem.

It is high time that our legislators took the matter in their more competent hands. We, therefore, urge each of you to join with those others who have the true interest of our nation at heart in contacting your legislators and requesting that they declare the obtaining of production paramount to the maintenance of existing price levels, and prescribe legislative standards to assure that price controls be exercised in a manner calculated to secure maximum production.

We must again be reminded that the Price Control Act was created to stabilize prices, not to restrict profits or production. It was a war measure and not a permanent law for the American people. We retailers are accepting it as a *temporary* peacetime measure because we, more than any group or class, know the dangers that would follow a premature lifting of controls. But we no more want controls to go on indefinitely than we want controls which keep our shelves bare of needed merchandise. Let there be an end to controls for control's sake.

An address delivered last month before the Chamber of Commerce of the U. S.

FIXTURES WANTED

Do you have extra used fixtures for the first floor departments and for the ready-to-wear and men's and boy's departments? An NRDGA member unable to get new fixtures would like to hear from stores refixturing, which would like to sell old equipment. *Write* THE BULLETIN.